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SURAT DISTRICT GAZETTEER

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GUJARAT STATE GAZETTEERS

Government of Gujarat

SURAT DISTRICT

(REVISED EDITION)

(Revised edition of Volume II of the original Gazetteer of the Bombay Presidency relating to Surat and Broach)

AHMEDABAD
DIRECTORATE OF GOVERNMENT PRINTING, STATIONERY
AND PUBLICATIONS, GUJARAT STATE
1962

GAZETTEER OF INDIA

GUJARAT STATE GAZETTEERS

SURAT DISTRICT

FIRST EDITION : 1877
(SURAT AND BROACH)
SECOND EDITION (Revised) : 1962

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PREFACE

THE GAZETTEER of Bombay Presidency, which included the districts of Gujarat, was originally compiled between 1874 and 1884. Broach and Surat District Gazetteers were combined in one volume which was published in 1877. In the revised edition of the Gazetteers which is now being prepared and published, it has been decided to devote one volume to every district Gazetteer.

This Surat volume was compiled and put into type before the bifurcation of Bombay State on 1st May 1960. However, because of the dislocation caused by the bifurcation it could not be published immediately. An attempt has, therefore, been made to bring the information as up-to-date as possible by adding a brief supplement at the end of Chapter XX.

Diacritical marks to explain the pronunciation of names of places and of words in Indian languages have been used only in two chapters--Chapter III, The People and Their Culture and Chapter XX, Places of Interest, and also in the Directory of Villages and Towns. In other chapters the current spellings have been retained. A key to the diacritical marks is given at the beginning of the Directory.

The Government of India have interested themselves in the preparation and publication of a new edition of Gazetteers of districts in all the States and have offered to the States a grant-in-aid for the purpose. A broad pattern of the contents of the revised volumes has been evolved and it is generally followed in this volume.

AHMEDABAD,
1st. August, 1962.

M. R. PALANDE,
Chief Editor.

GENERAL INTRODUCTION

AS EARLY as 1843 an attempt was made to arrange for the preparation of Statistical Accounts of the different districts of the Bombay Presidency. The following extract* will be found interesting as giving an idea of the intention of those who desired to have such Accounts compiled :—

"Government called on the Revenue Commissioner to obtain from all the Collectors as part of their next Annual Report the fullest available information regarding their districts..............Government remarked that as Collectors and their Assistants during the large portion of the year moved about the district in constant and intimate communication with all classes they possessed advantages which no other public officers enjoyed of acquiring a full knowledge of the condition of the country, the causes of progress or retrogradation, the good measures which require to be fostered and extended, the evil measures which call for abandonment, the defects in existing institutions which require to be remedied and the nature of the remedies to be applied. Collectors also, it was observed, have an opportunity of judging of the effect of British rule on the condition and character of the people, on their caste prejudices, and on their superstitious observances. They can trace any alteration for the better or worse in dwellings, clothing and diet, and can observe the use of improved implements of husbandry or other crafts, the habits of locomotion, the state of education, particularly among the higher classes whose decaying means and energy under our most leveling system compared with that of preceding governments will attract their attention. Finally they can learn how far existing village institutions are effectual to their end, and may be made available for self-government and in the management of local taxation for local purposes."

"In obedience to these orders, reports were received from the Collectors of Ahmedabad, Broach, Kaira, Thana and Khandesh. Some of the reports contained much interesting information. These five northern reports were practically the only result of the Circular Letter of 1843."

The matter does not seem to have been pursued any further.

In October, 1867, the Secretary of State for India desired the Bombay Government to take concrete steps for the compilation of a Gazetteer of the Presidency on the model of the Gazetteer prepared during the year for the Central Provinces. The Government of Bombay then requested some of its responsible officials to submit a scheme for carrying into effect the orders of the Secretary of State, and in 1868, appointed the Bombay Gazetteer Committee to supervise and direct the preparation of the Gazetteer. After a few organizational experiments the responsibility was finally entrusted to Mr. James M. Campbell of the Bombay Civil Service, who commenced the compilation in 1874 and completed the series in 1884. The actual publication, however, of these volumes was spread over a period of 27 years between 1877 and 1904, in which year the last General Index volume was published.

Though a Gazetteer literally means only a geographical index or a geographical dictionary, the scope of this particular compilation

*Gazetteer of the Bombay Presidency, Vol.I, Part I (History of Gujarat) pp. III and IV.

practices and customs of the main sections of the population has been given.

An important addition to the District Volume in this edition is the Directory of Villages and Towns given at the end which contains, in a tabulated form, useful information about every village and town in the district. The district map given in this edition is also fairly large and up-to-date.

The Revised Gazetteer will be published in two series :—

I. The General series.—This will comprise Volumes on subjects which can best be treated for the State as a whole and not for the smaller area of a district. As at present planned, they will deal with Physical Features, People and Their Culture, History, Language and Literature and Public Administration.

II. The District Series.—This will contain one Volume for every district of the Gujarat State. The information given in all Volumes will follow the same pattern and the table of contents will more or less be the same for all districts.

AHMEDABAD.
1st. August, 1962

M. R. PALANDE.
Chief Editor.

SURAT

PART I

CHAPTER 1—PHYSICAL FEATURES AND NATURAL RESOURCES

CHAPTER 1.

Physical Features

SITUATION

THE DISTRICT OF SURAT, *lying between 20° 15'—21° 28'N. and 72° 38'—74° E., has a total area of 4066-6 @ sq. miles and a population of 1,827,842 according to the 1951 census.

The new district.

With the integration of the adjoining territories of the Baroda, Bansda, Sachin and Dharampur states, the new district of Surat has undergone a great change in its total area and population as well as in its boundaries, administrative subdivisions, economy and landscape patterns. Situated on the shore of the Arbian Sea, where its waters begin to narrow into the Gulf of Cambay, the district stretches for about eighty miles from the Damanaganga river in the south to the Kim in the north. On the north, a line following for about forty miles the course of the Kim, and then passing eastwards for about sixty miles along the southern spurs of the Rajpipla hills, separates Surat from the district of Broach. The eastern boundary is more irregular. At its north-eastern extremity, it bulges out to include the plain tract of the Tapi river and its tributary streams, and then skirts round the Navapur sub-division of the West Khandesh district, to touch nearly the Songadh fort. Then it projects south-eastwards for about sixty miles. Its southern boundary, again, is irregular,

Boundaries.

*The district of Surat was reorganised in 1949. It now consists of the former Surat district of Bombay Province (except for two villages transferred to Nasik district and three villages transferred to Dangs district) with the addition of the former Indian States of Bansda, Sachin and Dharampur, the Navsari district of the former Baroda State, 24 villages of the Broach district and four villages of Dangs district.

@The area figure supplied to the Census authorities by the Surveyor General of India was 4,499 sq. miles. The area figure given by the Census authorities were obtained by them from the District Inspector of Land Records or from Local Records.

As there was a great disparity of 433.6 sq. miles between the figures collected by the Census authorities and those supplied by the Surveyor General of India, the attention of the Director of Land Records was drawn to it, and he states that the area figures taken from the Land Records total 4,298 sq. miles, which with the area of reserved forests, *viz.*, 242 sq. miles, brings the total up to 4,540 sq. miles. This reduces the disparity to a smaller figure of 41 sq. miles.

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though it generally follows the course of the Damanganga river. From the administrative point of view, the district is bordered by the Broach district in the north, the West Khandesh district and the small district of the Dangs in the east, and the Surgana and Paint sub-divisions of the Nasik District, in the south east. To the south lie two Portuguese occupied areas,*Nagar-Haveli on the south-east and Daman on the south-west, separated by a stretch of the Umbergaon peta of the Thana District.

Administrative sub-divisions

The district has 15 towns and 1,938 villages. The density of population per square mile is 449. Both in point of total number and density of population the Chorasi taluka stands first among all the sub-divisions, with its population of 3,049,032, distributed over 221.1 sq. miles, giving an average density of nearly 1,579 persons to the square mile. This taluka, however, includes Surat City, with a population of 2,23,182. In point of area Dharampur is the largest sub-division, comprising 574.6 sq. miles, but in density of population it ranks lowest with only 195 to the square mile. Valod peta, with a population of only 36,179 forms the smallest sub-division in point of total number of population, while Palsana peta, with only 57.6 sq. miles, forms the smallest sub-division in point of area.

RELIEF AND DRAINAGE

Geographically, the district of Surat belongs to the western coastlands of the Deccan Peninsula. The main Sahyadrian scarp is a little outside the limits of the district. It lies in the West Khandesh and Nasik districts. But it gives the district its orientation, its landscape features and its drainage pattern. The transverse members of the Sahyadrian scarp project into the eastern sub-divisions of the district in the shape of low hill ranges and subdued plateau features. Here the landscape is mostly influenced by the undulating Deccan traps, though locally limestone introduces an interesting variation. This hilly tract is almost in the form of an arc broadly stretching from the sub-division Songad to the south-western margins of the Dharampur sub-division. From this tract of varied topography, emanates the drainage pattern of the district. The Kim, Tapi, Mindhola, Purna, Ambika, Auranga, and Damanganga, are the main streams which, flowing parallelly, drain the entire area of the district. The evolution of the alluvial plain of the Surat district is mainly due to this drainage pattern in which the streams emerging out of the Sahyadrian watershed and in the case of the Tapi from beyond the Sahyadrian scarp, have eroded the highland portions, transported the debris to deposit it in the shallow extensions of the Arabian Sea to create an alluvial plain. This plain of the Surat district extends north and south, and forms a part of the larger plain of the Gujarat and North Konkan coast. From north to south, it stretches for about eightly miles, and has a gradual slope from the highlands in the east towards the Gulf of Cambay

* The areas were liberated from Portuguese rule at the end of 1961 and are now administered by the Government of India.

RELIEF AND DRAINAGE

in the west. The plain has its maximum extension along the Tapi valley and its estuarine tract, but southwards the inward bending coastline and the south-western trend of the Dharampur hills narrow it down to about thirty miles in width. Though taken as a whole, this part of the Surat district forms a plain broken by a few hills and low level plateau features, it varies in details of landscape and land use. The river meanders, terraces, isolated alluvial mounds possibly remnants of a former alluvial plain, intense gully erosion, and local outscrops of trap, all these introduce an interesting change in the scenery of the plain and also affect the agricultural production as well as human settlements to a marked degree. In general, however, the northern part of the plain is more fertile, but the quality of the soil deteriorates both seawards and towards the hills in the interior. Thus, this part of the plain could be divided into three belts running parrallel to the line of the cost : nearest the sea a barren stretch of sand-drift and salt marsh ; behind that a rich, highly cultivated plain, and further east, poorer and open land rising gradually into a wild tract of hill and forest.

Coast line.

The coast line of the Surat district shows the characteristic features of a coast line of emergence, where both the sea and riverine deposition have influenced the landscape. The major esturine tracts of the Kim, Tapi, Mindhola, Purna and Ambika, are areas of intense alluvial deposition, meandering rivulets, and choked up mouths. Under the influence of marine action, these river mouths have developed sand bars and alluvial banks which, as near Dumas and Bhimpur, appear dark and slimy. Outside the limit of tidal action, there is a sudden change in the scenery. The aspect is drier and low chains of sand dunes and drifting sand dominate the scene. These in some places are barren : in others, they carry a scanty vegetation, consisting chiefly of creepers and low bush. But behind this sandy fringe that extends almost all along the coast line there are the tidal flats stretching on the sides of the estuaries. Here, tidal waters find ready entrance and try to cover a larger expanse of the low-lying country. Landscape in this region is dull and monotonous ; extensive areas of salt marsh, threaded channels of tidal streams, salt encrusted surfaces, and poor vegetation, form typical scenic features in this tract

Alluvial belts.

Behind this zone of sand dunes and tidal flats lie the alluvial belts, irregular and mostly following the river courses. These form the main agriculturally valuable lands of Surat. From the point of view of relief and appearance they are almost uniform, but they vary considerably in extent. Here, in appearance the land becomes richer in colour and in agricultural use. From sand and salt marshes, there is a change into sandy loams, and then into rich alluvial soils in the milddle portions of the district. Eastwards, that is towards the hilly tracts of the Sahyadries, the order becomes reversed : from rich black soil to poorer reddish or brownish varieties. There are

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Physical Features

RELIEF AND DRAINAGE

two noticeable features of the alluvial belts ; intense gully erosion, and terraces along the major rivers. Gully erosion and deeply entrenched tributary streams severely limit the agricultural value of land and the problem becomes more intense wherever the land is more fertile. The proportion of such deeply eroded land increases towards the banks of the major rivers, whose terraces have been very nearly destroyed by gully erosion. In many stretches of the Tapi river, well formed terraces appear as 'benches', often broken, here and there, by tributary streams. These benches not only mark a local variation in relief, but control local land use and sites of villages and towns. Another landscape variation in this region occurs in the shape of knolls-isolated alluvial mounds of moderate height—and gently curving water divides. Here, the alluvial cover is drier and poorer, and therefore generally bears poor grass or scrub.

As has been mentioned earlier, these alluvial belts of the district have a varied extension. The belt of the Tapi basin is evidently the largest ; southwards these areas beome progressively smaller and have an increasing variation in topography in the shape of low residual hills and plateaus

Eastern Hills.

Towards the east, beyond the zone of the alluvial and black soil belts, the land changes its appearance in many ways. Deeply furrowed streams and entrenched rivers secure a setting of low hills and plateaus The land wears a much dissected and poorer appearance. Vegetation cover over large areas consists of acacias, datepalms and coarser varieties which serve as indigenous timber. There is a steady decrease in land under agricul ure so much so that on the eastern fringe of the district agriculture is almost completely displaced by forests. This eastern part of the district, especially the newly intergated States areas, belongs physically to the Sahyadrian hills and their minor members. In the north, near the village of Tadkeshwar, on the right of the Tapi, and further east in the Mandvi sub-division, a chain of flat topped hills, underlain by trap, varying from 200 to 300 feet in height stretch northwards to the main lines of the Rajpipla range. South of the Tapi a succession of highlands running north-east from the Sahyadries to the left bank of the Tapi, separates the plains of Khandesh and Surat. Further south, the western spurs of these highlands project well within the district. The landscape in the Vyara, Bansda and Dharampur sub-divisions is dominated by such low hill ranges, mostly developed on the Deccan trap, and intermediate amphitheatres developed out of alluvial debries washed down from these hills. Massive lavas, such as that of the Songad Fort, stand out prominently in such alluvial amphitheatres, and often acquire a strategic importance. It is interesting to note that the eastern hills have some small and limited counterparts in topography in the region of the alluvial belts and coastal margins. In these areas, they stand out as isolated remnants. Such, for instance, are the hills near Daman, (Dungri)

and twelve miles south of Dungri the hills of Parnera which rises to about 550 ft. above the plain. About five miles south of this hill, stands the ruined fort of Pardi on a slight eminence. Further south lie some hills near Bagwara and some outliers of the Dharampur hills.

Rivers.

The Kim and the Tapi are the two major rivers of the district. The southern streams, though short and comparatively scanty of volume, are valuable on account of their estuaries which are navigable upto a point for small country craft. In their physical characteristics these smaller streams show a uniform pattern. Rising in the highlands of the eastern margin, they flow westwards, and in many cases develop rocky beds, and wide banks, marked sometimes by alluvial cliffs and terraces and at other places by gentler slopes Swollen into torrents in the rainy season, the freshes soon pass off, and in the dry weather only a scanty flow of water remains, here and there trickling among the stones and again forming deep pools of still water. Below the tidal limits, the streams passing between banks of slime and mud, are for light country craft generally navigable as far as ten miles from the coast.

The Kim.

The Kim, with a course of seventy miles in length, and a drainage area estimated at 700 sq. miles, forming the northern limit of Surat district, joins the Gulf of Cambay, about twenty miles to the north of the estuary of the Tapi. Rising in the Rajpipla hills, the Kim for the first fifty miles of its course passes through the Rajpipla and Valia sub-divisions of the Broach district. For the remaining twenty miles the river winds in a westerly direction between Ankleshwar and the sub-division of Surat on the left. Like the other rivers of the district the course of the Kim is marked with high alluvial banks broken by numerous gullies. The northern bank is steeper and more rugged than that on the south. The fall in the bed of the river is rapid, and its stream, though in times of flood difficult to cross, in the fair season dwindles down to a succession of pools. Its waters are hardly used for irrigation. Though the tidal wave is felt for some miles up the channel, there is not depth enough to allow of the passage of boats.

The Tapi.

The river Tapi has a course of about 470 miles, a drainage area of about 30,000 sq. miles, and carries to the sea a volume of water estimated to vary from an hourly discharge of 120,000,-000 cubic yards during seasons of extreme flood to 25,000 cubic yards towards the close of the dry-wether months.

The Course.

The course of the Tapi westwards from the high lands of Central India to the sea, may be divided into four chief sections the first, of 150 miles, from its source in the west of the great Satpura plateau through parts of the Central Provinces and Berar till, a few miles below the town of Barhanpur, where it enters the plains of Khandesh: the second of 180 miles of its passage across Khandesh: the third, where the waters of the river

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The Course

through fifty miles of hill rock force their way down to the low lands of Gujarat; and the fourth, ninety miles more, across the alluvial plain of Surat.

Though the main stream may be traced for some miles further, a sacred reservoir in the town of Multai, in the Betul district of Madhya Pradesh is considered as the traditional source of the Tapi. After leaving Multai the stream runs at first through open and partially cultivated lands, and then cuts its way through a gap in the Satpura mountains, the Chikkaldara hills of Berar on the left, and the wilder range of Kalibhit on the right. Below this gorge the hills of Kalibhit again recede. But for the first 150 miles of its course spurs of the Satpura range still somewhat closely them in the valley of the Tapi. Falling rapidly from the Satpura uplands, through a deep-cut channel from 100 to 150 yards wide, the flood-waters of the river soon drain away, leaving in the dry season a stream which passing over a rocky bed can in many places, be forded. The banks, though high, are not steep, and, except where sharply cut by a turn in the river's course, they slope gradually to the level of the stream: and, like the country round, are covered with forest trees, brush-wood, and grass, a shelter to various wild animals.

Khandesh.

In the next stretch of 180 miles, the Tapi develops the wide valley plain of Khandesh. At its eastern extremity, where it is separated by only a slight fall from the plain of Berar, the elevation of the Khandesh plain varies between 700 to 750 feet above the sea level. From this point the Khandesh plain slopes towards the north west up to the high-lands that divide Khandesh from Surat. In its passage through Khandesh, the Tapi receives several tributaries. Of these the chief are, on the left bank, the Purna, the Waghur, the Girna, the Bori, the Punjhra, and the Shiva. On the right bank the neighbourhood of the Satpura hills prevents the formation of any large tributaries. This side is drained by the Suki, the Aner, the Arunawati, the Gomai, and the Waler. For the first 160 miles of its course in Khandesh the Tapi passes through a flat and well-cultivated country. The banks, from 250 to 400 yards apart, and generally raised about sixty feet above the bed of the stream, consist of two parts, a lower deposit of yellow earth and a covering layer of black soil, the whole raised but little above the level of the surrounding country. Except in a few places, where the course of the stream is interrupted by rocky outcrops, the water, after the floods of the rainy season are over, flows over gravel shoals, in threaded channels with a general breadth varying from 150 to 300 feet, a depth from nine to eighteen inches and velocity of from two to three miles an hour. In the last twenty miles of its Khandesh course, the river enters a zone of hills belonging to the Sahyadri-Satpura system. Here the stream, forcing its way among stones and boulders, quickens into rapids, or shoots over barriers of rock.

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Through the Ghats.

At the narrow passage known as the Deer's Leap or *Haranfal* the descent of the river from Khandesh to the plain of Gujarat begins. This section of the river's course, consisting partly of still deeper basins bordered by high cliffs, and partly of rapids formed by barriers of rock, extends through more than fifty miles of a wild and interesting country.

In Gujarat.

On leaving the Dang forests the Tapi enters on its last stage, the passage of fifty miles in a direct line, or including wide meanders, of nearly ninety miles across the Surat plain to the sea. These ninety miles of the course of the Tapi are naturally divided into two parts by the tidal limit. Of these the upper or fresh water section includes about sixty miles, and the lower or tidal section a little more than thirty. Though they gradually merge into each other, the character of these two sections is in several respects distinct. In the upper part, the river passes through the less cultivated tracts in the east of the Surat plain. It is only when the village of Waghecha is passed that the last spur of the Rajpipla hills is left behind. In this section of its course the river flows between banks from 500 to 1,000 yards apart, formed of thirty to forty feet of tough, yellowish clay interspersed with layers of limestone and capped with a deposit of from two to four feet of black soil. These high banks are characterised by the formation of terraces, which under the monsoonal regime, have suffered extensive erosion.

Tidal section.

In almost the whole of its course of thirty-two miles as a tidal river, the Tapi passes through the rich highly cultivated plain that forms the central part of the district of Surat. Only for a few miles before it joins the sea, the lands through which the river passes are barren and liable to be submerged by the tides. Below Patri, the course of the river stretches for about eight miles towards the south-west; then near the village of Waracha, where the tides daily ebb and flow, it winds westwards for about two miles. Here, a little above the village of Amoli, the limit of ordinary navigation, it strikes for three miles sharply to the north-west till, at Variav, the lowest ford in the course of the river, it bends for three miles more to the south-west; then winding again to the south-east, it runs for four miles in a line almost parallel to its former course to the city of Surat, where it again strikes suddenly towards the south-west. So sharp is this curve in the river's course that though by water Surat is more than ten miles from Amroli, by land the distance is little more than two. Below Surat the river stretches to the south-west till, about four miles from its mouth, it turns to the left and, gradually widening, flows westwards into the sea. In this section of its course the banks have little of the steep and rough character they bear further up the stream. Below the limit of the tide, as the current becomes weaker, the river flows in a wider flood plain held by gentle banks. In times of flood, the river, over-topping the left bank,

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Tidal Section

and a great body of water rushing south-east wards, has more than once flooded the city of Surat. Further down-stream, at the more abrupt meanders, as on the right bank at Rander, and at Surat about two miles further down on the left bank, the river develops, by lateral erosion, rather steep cliffs of small height.

Bed of the river.

Below the limit of the tide, the bed of the river is covered by a layer of mud. This deposit varies from a few inches, where the tide runs strong, to as much as four feet in the still bends of the river. Opposite the city of Surat, and a little down stream the sand washed down in times of flood has formed banks and shoals. Especially this is the case near the mouth of the river, where the currents of the stream and tide meeting have, across almost the entire breadth of the river, thrown up alternate layers of sand and clay.

Tributaries.

In its passage through the Surat district the only important tributary received by the Tapi is the Wareli. This stream, rising in the western spurs of the Rajpipla hills, flows towards the south-west across the Mandvi sub-division, and after a course of about fifteen miles joins the Tapi on its right bank at the village of Piparia, forty miles from the sea.

Islands.

At the Waghecha rapids, about forty miles from its mouth, trap rock *in situ* forms several islands in the bed of the Tapi. These islands, though occasionally liable to be flooded, are covered with trees as well as with grass and bushes. Of the banks of sand and clay that rise above the ordinary level of the Tapi's stream the chief island lies in a bend of the right bank of the river about five miles below the city of Surat. Near the mouth of the river, inside the bar, are also one or two flat and wooded islands.

Ferries.

In its course through the Surat district there are two important ferries across the Tapi. From the town of Mandvi, on the right bank of the stream, about sixty miles from its mouth to the villages on the southern bank and the other between the city of Surat and the villages on the northern bank. The Tapi can be forded at three places within the limits of the district. Of these Karod is the highest up, about fifty-six miles from the sea: the next Bodhan, about forty ; and Wariav, about twenty miles from the mouth of the river

Navigation.

Navigation of the Tapi river engaged the attention of the British administrators a good deal. An account of their attempts published in the first edition of the Surat Gazetteer is reproduced in Appendix I of this chapter. The navigability of the Tapi made Surat a historically famous port. But it is of a limited nature and largely restricted to the last fifteen miles of the river consisting mostly of the estuarine reach. Here too, only small country craft can go up stream only with a favourable

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Navigation

tide. The current has great seasonal variation and the course of river swings from the right bank to the left. Due to the silting up of the mouth, even the landing jetty at Surat has now a limited use.

Floods.

Floods form another significant feature in the geography of the Tapi river. Due to monsoonal regime, the river has annual floods, but on certain occasions these occupy a larger expanse and cause much damage to life and property. An account of the former floods appearing in the first edition of the Gazetteer is reproduced in Appendix II of this Chapter. At the end of it is added an account of the floods that have occured after 1876. With the construction of the Kakrapar dam, a more controlled river regime is expected and accordingly the flood menace is likely to be considerably minimised.

Irrigation.

Till recent times, there was very little land under irrigation though efforts were made to develope irrigation facilities during the first phase of the British Administration. A fuller account of these surveys appears in the first edition of the Gazetteer and is reproduced in Appendix III. Irrigation has now made rapid strides, especially with the development of the Kakrapar project on the Tapi. The canals drawn on both the banks of river from the Kakrapar site promise to change the face of the country side and bring in prosperity to the agricultural interior. This major project is supplemented in this district by other minor irrigation works generally consisting of wells. Altogether irrigation has ushered in an era of significant agricultural progress.

Sanctity of the river.

Though it enjoys a less wide-spread reputation for sanctity than the Narmada, the Tapi receives much local respect. On its banks there are, according to the *puranas* (religious history) no fewer than one hundred and eight spots, or *tirthas* of special sanctity. Of these, the chief is Bodhan, about fifteen miles east of Surat, where a religious gathering is held once in every twelve years. Ashvani Kumar and Gupteshwar, places about two miles up the river from Surat, are also held in esteem. Both spots are provided with temples, rest-houses, and flights of steps leading down to the water, and here, on several occasions in each year, large numbers come together to bathe. Gupteshwar is also a favourite place for burning the dead.

Southern Streams

Of the smaller streams those rising in the slope of the highlands between Surat and Khandesh, flow westward across the district of Surat, the most northerly is the Mindhola or Midagri, which falls into the sea about five miles south of the Tapi. The forty miles of this river's course, westwards through Surat, consists of three sections of nearly equal length. Of these, the first passes through the sub-division of Bardoli, the second across the sub-division of Navsari, and the third between the Sachin village and some of the southern parts of the Chorasi sub-division on the right and Navsari sub-division on the left. For the first

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thirty miles of its course the Mindhola runs westwards till, about ten miles from the sea, taking a sudden bend, it strides north for about four miles, and here, meeting the Kankrakhari stream from near the town of Surat, they together bend westwards, broadening into an estuary two miles wide. Of its total length of forty miles through the district of Surat, for the first thirty the waters of the Mindhola are fresh, passing between alluvial banks, in some places steep and in others sloping gradually to the level of the stream. In the earlier parts of its course, rocks occasionally crop up in the bed of the river, but further to the west the stream passes over a surface of tough clay. The limit of the tidal section is ten miles from the sea, and near this point, where the railway crosses the river, about four miles south of Sachin, the breadth of its bed is 360 feet., and height of the left bank is forty feet. The water, here is five feet deep, and it is crossed at half tides in boats The mouth of the Mindhola, known as the Sachin of or 'False' river, is navigable for small country craft. Except indirectly, by filling the wells along its banks, the waters of the Mindhola are not used for irrigation.

The Purna.

The Purna, with a westerly course of about fifty miles across the Surat district, joins the sea ten miles south of the Mindhola. It mostly drains the lands of the Vyara and Gandevi sub-divisions. The Purna's passage across Surat is divided into two sections one above and the other below the limit of the tide In the upper part of its course the Purna passes for some distance over beds and ridges of rock Its waters, raised in buckets poised at the end of a long lever called '*Dhekudi*' are used to some extent for irrigation About twenty miles from the sea, near the village of Tarsari, the tidal section begins Ten miles further west, the stream divides into two branches, which again unite at short distance lower down A little above their junction these branches are crossed by the railway lines. Below the junction, the river, passing between low banks 960 feet apart, can be forded when, the tide is out, through two feet of water over a bed of sand and mud. For the passage of the river at other states of the tide two crossings are possible, one near the town of Navsari, on the left of the river, twelve miles from the sea, and the other at Jalalpur, about two miles further down on the same side of the stream. Below Navsari the Purna is, in books of Navigation, referred to as the Navasari river. Here it is navigable by small boats. But though the bed of the river in this part of its course is broad, the cannel, winding among banks of sand, is hard to hit upon. In 1852 the passage was more open, but in 1872 no vessel without a pilot could safely enter. In more recent times the navigability has further suffered, due to siltation.

The Ambika.

The Ambika river, after winding course of about forty miles towards the south-west, joins the sea fifteen miles south of the Purna. This stream, rising in the Bansda hills, flows west-ward

RIVERS

In two widely separated channels draining the lands of Chikhali and Jalapur. The town ot Gandevi, about twelve miles from the mouth of the river, is the limit of the flow of the tide. At about five miles from the sea the Ambika is joined from the left by two considerable streams, the Kaveri and Kharera. Below this junction the bed of the river widens out into a broad estuary stretching westwards to the sea. About a mile and a half from the entrance is a bar covered at low water to a depth of three or four feet. and with a tidal rise of twenty-two feet. Country-craft can pass from the sea up for about six miles as far as Bilimora. Beyond Bilimora, for five miles more to Gandevi, the stream is navigable by small boats. Of the two tributaries of the Ambika. the Kaveri, rising in the Bansda sub-division passes westward about eighteen miles across the Chikhali sub-division till it joins the Ambika at Waghrech. The other tributary, the Kharera rising in the Dharampur hills, drains the northern part of Bulsar and joins the estuary of the Ambika about a mile west of the Kaveri. For a few miles above its junction with the Ambika the Kharera, like the Kaveri, is navigable by the smaller class of countrycraft.

The Auranga

The Auranga river, rising in the Dharampur hills, flows for about miles, first westward and then towards the north-west, through Bulsar and joins the sea about eight miles south of the Ambika. In the upper part of its course the banks of the stream are steep, and the country some what rugged. But, for the last fifteen miles, including the meanders, the Auranga is a tidal stream navigable by small boats for about six miles from the sea. At Bulsar the river passes over rocks and gravel along a channel 600 feet wide West of Bulsar the depth of the channel at low tide varies from seven to nine feet till after four miles, the bar at the mouth of the river is reached. This bar at low-tide springs covered only by two or three feet of water, but has a tidal rise of eighteen feet. The town and port of Bulsar is situated on the left bank of the river, about four miles from the sea The Wanki is the only tributary of the Auranga, which after, a rocky and winding course, joins it within half a mile of the sea.

The Par

The Par, with a north-westernly course of about fifty miles across the district of Surat, drains the central parts of Dharampur and separates Bulsar on the north, from Pardi on the south, nd joins the sea about six miles south of the Auranga river. hough in the dry season a very small stream, during the rainy nonths the Par is sometimes a swollen by very heavy floods. Jpto about four miles up the river from its mouth the tides bb and flow, and springs there is water enough for small boats. t the village of Umarsari, near its mouth, the creek is about 50 feet wide, the banks are high and the bed of rock, mud, and avel. Travellers are here taken across the river in boats, as e water is too deep to allow of fording. The bar at the mouth the river is dry at low-tides, but at high tides the water has a

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depth of fourteen feet, and in front of the landing place, only a short distance within the bar, vessels can anchor on a clean sandy beach.

The Kolak

The Kolak, a minor stream, flows through Pardi and joins the sea about five miles south of the Par. This river, after passing for the greater part of its Surat course through Pardi, separates, near its mouth, the district of Surat on the right bank from the territory of Daman on the left. At the beginning of its course, passing over a rocky bed, the Kolak, about eight miles from the sea, comes within the influence of the tides. At its mouth, near the village of Kolak, where it has a breadth of nearly 500 feet, the river can only be crossed in boats. Smaller countrycraft can enter and find a clean and good landing. Beyond the bar are the beds of oysters for which the Kolak river is famous.

The Damanganga

The Damanganga river drains portions of Dhrampur and some parts of the territories of Daman. The mouth of the river and about five miles of its length from the sea is in Daman. The tidal wave passes up its channel for about eight miles. During the months of the south-west monsoon the mouth of this river forms an excellent shelter for small vessels. On the bar, at low-water spring tide, is a depth of two feet, with a tidal rise varying from twelve feet at neaps to eighteen feet at springs. Except from the north point of the river, where rocky ground projects to a considerable distance the bar is very flat, consisting chiefly of hard sand. The channel within the bar is extremely narrow, and the sand-banks shift every stormy season.[4]

Creeks

Besides three rivers, there are in the parts of the district near the coast, many smaller streams which, during the greater part of the year, are little more than channels for the tidal waters. In the north of the district the Sina river, passing for about twenty miles through the Olpad sub-division, joins the sea five miles south of the Kim. On the right bank of this creek, about four miles from the coast, is the small harbour of Bhagwa. Near Olpad, about eight miles in the south above the mouth of the Tapi, a back water called the Tena creek, stretches inland for about eight miles. In the west of Jalalpur four miles north of the Ambika or Gandevi river, the Kanai creek forms a large inlet for the waters of the sea. At a short distance from the coast, the main channel of this back water divides into two parts. One branch, running for about fifteen miles north-east, is for part of its course a tidal creek, and for the rest a fresh-water stream. The other branch, passing east-wards for about seven miles, joins the Ambika river below the limit of the tide, and is, therefore, throughout its course, a salt-water lagoon. In the west of Bulsar between the course of the Ambika and the Auranga rivers, the land is much cut up by salt-water channels that, entering about a mile north of the Auranga, penetrate for about ten miles inland to the east and north-east. Of these channels, the

chief are the Bham, Khapri, and Koli. Finally, in the south of the district, between the Par and Kolak rivers, runs the Kothal creek with a deep rocky bed about 135 feet wide. Into this channel several small streams bring from the east the drainage of the central portions of Pardi.

LAKES

The district contains no natural lakes, but is well supplied with reservoirs, which cover a total area of 10,838 acres. With the exception of the reservoir at *Palam*, 153 acres in exent, and irrigating a large area of land, the other ponds are all small, formed by earthen embankments thrown, in horse-shoe shape across the line of natural drainage. Only a few of them have retaining walls of masonry, and after February all are more or less dry.

Geographica Regions

The new district of Surat is much more compact than its predecessor which had several administrative breaks in its area owing to the existence of the territories of the Baroda, Bansda, Dharampur and Sachin States. Geographically, however, the district has interesting regional variations. The physical features of the district primarily influence its landscape and economic development, and thus afford a suitable basis for a regional subdivision.

The Coastal B

From the sea, a coastal fringe of about ten to twelve miles wide has a characteristic scenery that is dominated by a smooth coastline, estuarine tracts, tidal creeks, sand dunes, silted river mouths with alluvial islands, and tidal marshes stretching well into the interior. Vegetation cover is scanty, often marked by palms, and nearer the tidal limits by a poor mangrove vegetation. Those physical characteristics steadily assert themselves from the south to the north where the proportion of estuarine and tidal marsh tract increases Owing to the poverty of the region, it carries a thin population excepting in the junctional sites where it is mostly urban. Villages are comparatively few and are generally situated either on the sand dune belts along the coastline where fresh water supplies are available at shallow depths, or along the banks of the main rivers. The coastal villages tend to have a linear pattern, almost parallel to the shore line, and as is to be expected these are inhabited by a large proportion of fishermen. other factors have, however, brought some settlements into prominence. Dumas (pop 3,540) and Bhimpore (pop. 3,190), for example, are now well developed holiday resorts on account of their effualble temperature and a fairly good beach. They attract a holiday crowd during the summer season. Sunwali (pop. 2,312) once an important port, is now a straggling hamlet. Behind this line of coastal villages and hamlets, tidal marshes limit agricultural land to slightly raised grounds that are not covered by saline waters. But even here the soil is influenced by wind, blown sand and saline air, rendering it poor for agricultural production. In this area the villages have a clustered pattern but on an average they are smaller and thinly populated.

CHAPTER 1.
Physical Features
COASTAL BELT

It is the eastern limit of this coastal belt that gains human importance in the shape of well developed towns of which the city of Surat is the foremost.

Junctional towns and Surat.

Thus from the south to north, there is a string of towns situated at the junction of the coastal belt and the alluvial plain behind. This is because the junction derives advantage from both the coastal strip with its navigation and commerce, and the alluvial plain with its agricultural wealth. Pardi (pop. 9,422) owed its early importance to its fort situated on the neighboring hill and controlling the navigation of the Ambika river. Bulsar (pop. 25,440) has a similar situation, but is more prosperous on account of a rich agricultural hinterland that is known for its fruit and its recent industrial development. It also taps the economic products of the Dharampur interior through its roads and tracks. Bilimora (pop. 16,669) and Gandevi (pop. 8,384) are local commercial and administrative centres Bilimora acts as an outlet to the Bansda products through a branch line of the Western Railway. Navsari (pop. 44,663) is a flourishing commercial and industrial town.

Surat.

Surat (pop. 2,23,183) is the administrative and economic focus of the district. Situated on the southern bank of the Tapi mouth, it is the leading commercial centre of South Gujarat. Its original site seems to have been determined by the bend of the Tapi river downstream and an alluvial mound rising above a generally marshy region. This is clearly visible in the sudden elevation of the central older protions of the city, and the ill drained channels that surround the older zone and separate it from its newly developing suburbs. Historically the prosperity of Surat dates from the early Hindu period. It continued during the Muslim rule. But the port suddenly acquired commercial importance in the days of the European rivalry on the West Coast. The English factory at Surat attracted commerce and industry to the town. Population recorded a notable increase. In the early phase of the East India Company's history on the West Coast, Surat became their administrative headquarters. This gave Surat's famous indigenous industries of gold and silver thread a stimulus by opening the markets of Europe. This prosperity however, could not be retained for long. The Tapi mouth was rapidly silting up. On the other hand progress in oceanic navigation meant larger sailing vessels which necessiatated deeper harbour facilities. For some time these handicaps experienced at the Surat river frontage were partially overcome by devoloping the Suwalli Roads. But ultimately the choice fell on Bombay. Along with the transfer of the Company's headquarters to Bombay went the commercial prosperity of Surat. During the 18th and 19th centuries, therefore, Surat recorded a considerable decline in its population and economic condition. With the construction of the Western Railway route, it partially recovered its fortunes, and during recent times, industrialisation promises to restore its former status. The

famous gold and silver thread industry has survived the competition of the large scale enterpise, and still engages an appreciable number of workers. But the new industrialisation centres round the textiles—both cotton and silk. These historical and economimic impacts on the city are clearly visible in its present form and functions. The nucleus of the city is the original centre of the old fortification, a raised portion of the ground in completely ill-drained and marshy surroundings. On the river front, in the southwest, the indigenous urban landscape is modified by East India Company's warehouses and their fortified walls. This is now, as in most other historical towns, the administrative 'core' of Surat with the Collector's and other offices. Beyond the castle lies the arc of the 'Inner Wall', enclosing the older commercial centre famous in the days of the Company, and marked by several wards—'Chaklas'. Outside this older zone, extends the 'Outer Wall' enclosing the later extensions of the city. with a steady growth of the city and a rise in its population during the current century, the city has now grown out of its fortified area. All along the rapidly crumbling structure of the wall and the sluggish streams flowing close by, the urban landscape deteriorates into poverty stricken dwellings and slums. To the north there is a change to an agricultural landscape marked by gardens and well tilled black soild fields round about Katargam, but towards the river banks near Singapur and Dabhoi, stretches of marsh, sand dunes, and gully erosion, renders the landscape somewhat dreary. Agricultural land is restricted, and palms and scrubby vegetation form the main elements in scenery. To the north-east of Surat lie the famous railway bridge and beyond it the newly erected Utran Thermal Station which supplies electric power to Surat and its surroundings. East of the railway line there is the rapidly growing industricl belt of Surat, located there because of its generous area, vicinity of the Railway Station and an adquate water supply. It is clear, however, that in places this industrial expansion is encroaching upon valuable agricultural land. The western limits of Surat end at the Tapi river frontage where the upper portion is marked by buttressed houses and the lower one by the landing jetties. The bridge connecting Surat with Rander on the opposite bank is sited on a rising alluvial mound, but it has no such counterpart on the opposite bank, which explains why the bridge suffered damage some time back from the Tapi floods. To the south-east, there is no urban extension, evidently because of the marshy stretches of the Kakar Khadi. It is only to the east of this stream that the city resumes its growth in the shape of the Udhana railway station with its marshalling yards and the line of the Tapi Valley railway connecting Surat with Khandesh through the Navapur gap. Accordingly, the recent urban extension of the city is mostly confined to its south western environs where land is plentiful, a good river frontage and a healthy western breeze have promoted extensive building activity in the Athwa area, consisting of public officials, educational institutions and upper class residential houses. Outside this newly developing suburban area, the land merges

CHAPTER 1.
Physical Features
SURAT
The Agricultural Belt.

into the agricultural plain which wears a new appearance in the form of the extensive canals drawn from the Kakrapar project in the upper reaches of the Tapi river.

Broadly, to the east of the line of these junctional towns and the city of Surat—which is conveniently marked also by the Western Railway track—begins the rich agricultural belt of the Surat district. In form it is irregular and mostly co-extensive with the river basins. It is extensive in the north and much restricted in the south, and its level nature and therefore its agricultural value is further restricted by isolated hills, extensive gully erosion and marshy patches created by the swinging channels of streams. Over the drier patches the landscape is dominated by the acacia—*bawal*—and other scrub, and in the water-logged and salt crusted fringes along the river, it is the palm and *tarwad* (cassia tora) that dominate the scene Outside these poorer tracts, the central protions of this belt are agriculturally very fertile because of the black soil. In the south in the central parts of the Pardi, Bulsar and Chikhali, rice is the maincrop, while in the northern parts it is cotton and wheat. The agricultural lands of Bardoli taluka occupy an intermediate position and on account of their fertile soil and favourable and reliable rainfall, have been famous for its agriculture. The southern and central parts of this agricultural belt are also famous for their fruit gardens while the northern tracts are essentially dry-crops zones producirng cotton as the main crop. The Tapi canals of the Kakrapar Project promise to bring a more intensive agricultural activity and prosperity to the central and northern parts. As may be expected this is the most thickly populated part of the district. Villages are large-sized and compact. Their form and the condition of houses reflect the prosperity of the rural community. Surat and the junctional towns exert a considerable influence on the economic and social life of the inhabitants. and therefore urban element as such in this belt is of a minor status. Bardoli (population 9,846) is a local route centre. Chikhali, though a taluka centre, is a small settlement with 4,000 population. The other taluka places of Mahuva and Valod have a similar status.

THE EASTERN HILLS REGION.

Roughly, a line drawn from the village of Mangrol in the north Dharampur in the south demarcates the agricultural belt of the district from its eastern marginal lands of varied topography and land use. This is an essentially sub-Sahyadrian zone of hills and valleys, varying in width from about thirty miles in the north to about fifteen in the south. The topography is irregular, marked by low chain of hills and broad well developed alluvial basins that are furrowed deep by fast flowing monsoonal streams. A typical monsoonal forest cover dominates the landscape, but the vegetation, on account of a lower rainfall and uncontrolled destruction of forests in the past, is of a sub-monsoonal type, consisting of 'teak pole' forest. Agriculture is rigidly limited to the narrow alluvial valleys where the soil is not very fertile.

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Physical Features

THE EASTERN HILL REGION

The intermediate slops connecting the hills with alluvial basins are generally given to rough grass and used therefore for cattle grazing. A certain amount of 'shifting cultivation' is practised in the hills by forest communities. On the whole this is a thinly settled tract, with comparatively backward economic and social conditions. Human activity follows the river valleys. Small sized villages adhere to the bases of hills, the junction between the flat alluvial beds below and the steeper slopes above. Strangely, the Tapi banks proper do not encourage much economic development mainly because the river passes through a gorge and several rapids. Its tributary valleys, on the other hand, are better settled. The mindhola valley, for instance, gives an easy access to Khandesh. The Tapi Valley Railway route passes this valley via Bardoli, Vyara and Songadh. Vyara (pop. 11,327) is a local trading centre which specialises in timber trade. Songadh (pop. 2,858) township nestles below the famous fort of Songadh which controlled the passage to the Khandesh under the Gaekwar rulers. The development of the Kakrapar project has infused a new activity into this valley, through the new road constructions to the Kakrapar site and the Ukai site to link them up with the railway. The project proper is calculated to bring greater economic stimulus to the immediate Tapi banks as well. The upper reaches of the Purna, Ambika, Auranga and Par rivers, have a similar geographical setting. They are thinly populated belts where a limited agricultural lands is mainly given to rice cultivation. Forest economy influences the life of the inhabitants through employment on forest work and collection of its economic products. Bansda (pop. 4,455) and Dharmpur (population 5,096) formerly the seats of the rulers of those States are now taluka headquarters and act as centres for local routes and commerce.

Geology.*

GENERAL.

Geological investigations in the Surat district and in the area to the east were first carried out by W. T. Blanford the results of which are given in his account entitled "On the Geology of the Taptee and Lower Narbudda valleys and some adjoining districts", *Mem. Geol. Surv. Ind.*, Vol. VI. Pt. 3, 1867 Numerous recent investigations taken up in this tract have further made it possible to differentiate the rock types and throw more light on the geology of the land.

The oldest rocks occurring to the north-east, east and south of the district, comprise the Deccan lava flows of Lower Eocene age in the form of horizontally bedded sheets, at times showing gentle local dips to the west towards the sea. These flows usually form flat-topped hills so characteristic of trappean country. The total thickness of the different trap flows aggregates nearly 7,000 feet; however, near Mandvi in the eastern portion of the district the maximum thickness of the different lavas would be of the order of some 2,000 feet.

*This section is contributed by Shri Burjor Mehta of the Geological Survey of India.

CHAPTER I.
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GEOLOGY
Structural Features.

Megascopically the traps could be differentiated into two predominant rock types. One is the dark grey to bluish-black, hard, compact, massive, holocrystalline, fine-grained basalt which usually forms the higher reaches of the hills. The other variety, often met with at lower leaves on slopes and valley floors, is the greenish to purplish, soft, medium to coarse-grained, amygdaloidal trap which is very much prone to spheroidal weathering. These amygdular types of flows are characterised by vesicles and amygdales variying from rounded to cylindrical in shape and infilled with secondary minerals like quartz, chalcedony, agate, amethyst, rock crystal, zeolites and calcite. These infillings of secondary minerals, formed after the cooling of the original magmas are often coated by thin films of green coloured palagonite, celadonite and iddingsite. Scoriaceous breccia, compacted ash and red bole beds are also noticed at different locations within exposed sections of different lavas or as outcrops. Divisional planes in the form of vertical or inclined joints are very conspicuously noticed in the harder variety of basalts.

Petrology.

Inter-trappean partings of two to ten feet in thickness representing lacustrine or fluviatile deposits are not rare in this region. These deposits may have been formed in the depressions in the then configuration of trappean land during the intervals of time lapsing between eruptions of successive lavas. Sometimes these shales contain impressions of plants, frogs, etc.

Networks of dykes varying in thickness from a few inches to over 35 feet in width are commonly found intruding the different lava flows and form knife-edged ridges in the "steppe" topography. These dykes are mostly basic but a few of these are also acidic in composition. The thicker dykes are usually of dolerite or olivine dolerite. Such dykes form conspicuous features in the terrain covering the whole of Vyara, Songadh, Mandvi, Bardoli, Bulsar, Pardi, Dharampur, Chikhali, Bansda Mahuwa, and Navsari talukas, and the Valod and Gandevi mahals.

Tertiary Rocks.

Overlying the traps, rocks of tertiary age spread in gentle undulations over a large portion of the district towards the west. They comprise sandy, impure, nummulitic fossiliferous limestones resting on laterite and lateritic clays; near the sea coast these rocks are concealed by alluvium. Grift, gravels, sandy clays, shales and massive, coarsegrained, white to brownish colours sandstones exhibiting false bedding, form the upper beds of this series. A fairly wide patch of these limestones occurs between Velacha to the east and Kim to the west. Near Tadkeshwar, the nummulitic limestones dip 10° south-east. Other sporadic local outcrops of these rocks are noticed to the west and south of the Tapti river. The basel beds of these series comprising nummulitic limestones and ferruginous clays are considered equivalent to Eocene in age. Many of the beds are highly fossiliferous; some are large fossil remain made up of nummulites, others of the separated valves of Balanidae; some

contain a number of univalve and other shells with which the teeth of sharks, segments of the caraface of a turtle, and portions of large ribs and of other bones have been found. The following is a rough list of fossils procured from these beds in the Tapti river, a little below Bodhan, near the junction of a small stream called the Rhea. These have been identified by Dr. F. Stoliczka.

Rostellaria Prestwichii, D'Orb.
Terebellium, sp.
Cerithium, sp.
Cypraea (*Cyproeovula*) elegans, Lam.
Natica longispira, Leym.
Conus, sp. (near *C. brevis*, but thinner)
Torchus, sp. (like *T. mitratus*, Desh)
Pholas, sp.
Pecten Hopkinsi, D'Arch and Haime.
,, *Favrei*, D'Arch.
,, *Cormeus*, Sow.
Vulsella legumen, D'Arch and Haime.
Ostrea Felmingi D'Arch.
,, *Lingua*, Sow.
Hornera, sp. (near *H. verrucosa*, M. Edw.)
Echinanthus (fragments).
Cidaris (spines).
Fragments of other Echinidae.
Stylocoenia Vicaryi, M. Edw. and Haime.
Trochoseris
Trochocyathus Vandenbackii, M. Edw. and Haime.
Nummlites perforata D'Orb.
,, *Brongniarti* D'Arch.
,, *Exponens*, or *spira* (probably both).

The overlying rocks comprising ferruginous sandstones and agate-bearing conglomerates found in the area to the north are taken to be of Upper Gaj formation of Moicene age.

Minerals.

It is presumed that the tertiary rocks continue further north up to Baroda, under the alluvium, and on the other side of the Gulf of Cambay, along the Saurashtra coast-line where exposures of sandstones, a conglomerates and clays of Gaj beds are known to occur. The striking of natural gas in bore holes in widely separated areas like Baroda, Ankleshwar, Gogha and Kodinar, is significant and proves the existence of tertiary rocks in the alluvial tracts of Gujarat.

CHAPTER 1.
Physical Features
GEOLOGY
TERTIARY ROCKS

Recent alluvium occupying the low ground and forming the edges and banks of the larger streams upto a little distance away from the sea covers as much as half of the western portion of the district. The boundary of this alluvial tract runs south-west from Mandvi to Pardi where it is found to be in contact with the Deccan lava flows. It is composed of a fine, light colour ed, argilaceous loam at times showing lines of stratification. Numerous nodular concretions of impure carbonate of lime or *kankar* are noticed in this alluvium occuring over large tracs of land. Beds of recent conglomerates with a calcareous cementing metrix are associated with this alluvium. Localised lenticular beds of clay and slit do not appear to persons over large areas. The coast-line is fringed with fine shore deposits forming sand hills and dunes. Near Tithal, these dunes are 10-20 feet high and exhibit false bedding due to aeolian action. Black and shining ilmenite and magnetite granules at times occur as fine dust over the sand in isolated patches, segregated due to wind action. It is possible that such patches may be found occurring elsewhere along the seaboard in this district. The interior of the idistrict to the east is usually covered by black cotton soil or *Regur*, or at times by a brownish to reddish lateritic soil cap.

MINERALS.

Economic Geology :—The Deccan lava flows cover a major portion of Surat District, the remaining portion being covered by later sedimentary rocks and river alluvium. As such mineral occurrences are scarce; however, the few minerals and rocks found in this tract which are of interest are described below :

Building Stones :—A major part of the Surat district is covered by the Deccan lava flows and it is not necessary to refer to all the localities where the rocks are or could be quarried for building purposes. Being hard and durable these rocks, are among the best building construction materials. However, in opening new quarries of trap rock, judicial selection of the site undoubtedly gives a longer life to the quarrying operations and goes a long way in its economic exploitation. The weathered surface of the material should be rejected and only the fresh portion at depth should be utilized. As a matter of routine material should be examined for carrying out tests like density, porosity crushing strength, attrition, etc. The Deccan traps and dolerites could also be used with advantage for railway ballast and as aggregate in concrete mixes. The soft, grey, green and purple scoriaceous and amygdular varieties of lavas should be scrupulously avoided from being used for constructional purposes. The darker coloured tertiary limestones occurring near Tadkeswar would also yield large quantities of possible ornamental stones. Clays for the manufacture of bricks also occur widely over the district.

A black type of sand is usually found throughout the district in areas covered by the Deccan traps. The material generally needs treatment by screening and cleaning before use. However

the river and coastal sands occurring in the western part of the district do contain sufficiently clean sand suitable for use in plaster, mortar and concrete. A local principal source of lime in the district is from, *kankar*, a concretionary form of lime carbonate, distributed widely in the river alluvium and also in the soil mantle covering the Deccan traps. On burning the material yields almost hydraulic lime or "natural cement" owing to the presence of a small proportion of argillaceous matter. These nodules of *kankar* are so widely scattered that it is not possible to refer to the many localities where they are found, or have been used for lime-burning.

Ilmenite : The beach sands near Tithal, four miles south-west of Bulsar, were investigated in detail by sinking pits along the coast. The eastern part of the coastal land above the high sea level was found to be composed of dry, alternate fine or coarse blown sand forming 10-20 feet high sand dunes on the surface of which black and shining ilmenite and magnetite granules occur as fine dust in isolated patches, rarely exceeding a few inches in thickness. As a source of ilmenite this occurrence has no economic significance. The titanium chiefly occurs in the form of titaniferous magnetite, pyroxene, etc. and is also not suitable for economical exploitation by chemical methods. Further processing of sand is not likely to improve the grade to a great extent.

Limestone.

The fossiliferous, yellow and brown, slightly cavernous limestone containing nummulites occurring near Tadkeshwar has been investigated and the quantity of probable reserves of this material may be of the order of about 2.9 million tons. Judging from chemical *analyses* of five samples given below, the limestone appears to be suitable for the manufacture of cement :—

CHEMICAL ANALYSIS OF FIVE SAMPLES

(Per cent)

Sample No.	1	2	3	4	5
R_2O_3	5.81	8.68	12.08	5.66	4.72
SiO_2	2.60	3.10	3.18	2.24	3.00
CaO	48.84	47.12	46.21	48.96	49.23
MgO	3.20	3.21	1.06	2.85	0.43
Loss	39.12	38.04	37.41	39.87	40.25
Total ...	99.57	100.15	99.94	99.58	97.63

Mineral waters.

Numerous mineral springs occur in localised directional series between the sea and the Western ghats in the Gujarat State. In the Surat district occur the well known hot springs near Unai on the Bilimora-Waghai narrow gauge section of the Western Railway. The springs emerge out of weathered

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Mineral waters.

and jointed Deccan traps. The spring waters belong to the chloride or saline type of thermal springs. Though the waters of these springs are not bacteriologically sterile and therefore not suitable for drinking purposes, yet on account of their high temperature ranging from 115° to 120° Fahrenheit, and the heavy mineral contents (total solids 1356 parts per million), they could be successfully utilised for the treatment of skin diseases and other rheumatic ailments. After detailed and systematic examination of these springs it has been recommended that "hydros" on the lines of those in use in foreign countries, should be constructed near Unai.

Salt.

Salt is recovered from sea water by solar evaporation along the coast of Bombay at many localities. In the Surat district it is largely produced at Tharasna and Meh-Magod. It is mostly utilised for domestic purposes.

Climate

The year may be divided broadly into (1) the winter season November to February, (2) the hot season from March to May, (3) the south-west monsoon sesason June to September and (4) the transition month October.

The winter season is the most pleasant in the district. Clear blue skies with stray high clouds occasionally and light cool north-easterly winds are characteristic of this season. In January and February light westerly sea breeze prevails in the afternoon. Mornings are chilly and it is not unusual for the temperature to drop to 45° F or less. January is the coldest month of the year. The minimum temperature touched a record low of 40° F at Surat on the 31st January 1929.

April and May are the hottest months, April being the hotter of the two. The heat is sometimes oppressive but relieved in the afternoon by the cool sea-breeze. The highest temperature recorded at Surat was 114° F on June 10th, 1901.

The south-west monsoon sets in by about the end of the second week of June in the district. South-westerly winds dominate from May and last till the end of September. About 95% of the annual rainfall in the district occurs during the months June to September.

The monsoon withdraws towards the end of September and the temperature rises temporarily during October.

The various meteorological elements are described in detail below.

TABLE No. 1

NORMAL, MONTHLY AND ANNUAL RAINFALL AND RAINY DAYS

Station		January	February	March	April	May	June	July	August	September	October	November	December	Annual
Surat	A	0.11	0.08	0.01	0.03	0.24	8.62	17.42	7.45	5.80	1.51	0.32	0.08	41.67
	B	0.3	0.2	0.	0.1	0.6	20.7	41.8	17.9	13.9	3.6	0.8	0.2	
	C	0.2	0.2	0.1	0.1	0.3	8.00	16.8	12.4	7.4	2.00	0.5	0.1	47.6
Olpad	A	0.13	0.07	0.01	0	0.12	7.03	14.43	6.76	5.47	1.45	0.31	0.08	35.86
	B	0.4	0.2	0	0	0.3	19.6	40.02	18.9	15.3	4.0	0.9	0.2	
	C	0.3	0.2	0	0	0.2	6.9	15.00	11.0	7.0	1.8	0.4	0.1	42.9
Mandvi	A	0.15	0.08	0.03	0.01	0.25	8.24	21.54	11.80	8.61	1.53	0.41	0.07	52.72
	B	0.3	0.1	0	0	0.5	15.6	40.9	22.4	16.3	2.9	0.8	0.1	
	C	0.3	0.2	0.1	0	0.5	8.4	19.3	17.4	9.7	1.9	0.5	0.2	58.5
Bardoli	A	0.13	0.09	0.05	0	0.22	8.97	22.55	11.03	7.97	1.58	0.36	0.06	53.01
	B	0.2	0.2	0.1	0	0.4	16.9	42.5	20.8	15.00	3.00	0.7	0.1	
	C	0.2	0.2	0.1	0	0.4	8.5	19.0	17.0	10.1	2.00	0.5	0.2	58.2
Valod	A	0.16	0.10	0.06	0.01	0.27	8.16	23.13	12.66	8.13	1.59	0.46	0.06	54.81
	B	0.3	0.2	0.1	0	0.5	14.9	42.2	23.1	14.8	2.9	0.8	0.1	
	C	0.2	0.2	0.2	0	0.4	8.7	20.0	18.3	10.2	1.8	0.4	0.2	60.6
Jalalpur	A	0.11	0.10	0.03	0	0.15	9.54	20.78	9·24	7.03	1.58	0.35	0.02	48.93
	B	0.2	0.2	0.1	0	0.3	19.5	42.5	18.9	14.4	3.2	0.7	0	
	C	0.2	0.2	0.1	0	0.4	8.2	17.8	14.4	8.5	1.8	0.3	1.00	52.00
Chikhali	A	0.11	0.09	0.02	0.01	0.21	11.46	26.92	14.93	9.22	2.14	0.39	0.06	65.56
	B	0.2	0.1	0	0	0.3	17.5	41.1	22.8	14.1	3.3	0.6	0.1	
	C	0.2	0.2	0	0	0.4	11.0	22.1	20.1	10.6	2.1	0.5	0.1	67.3
Bulsar	A	0.09	0.08	0.04	0.01	0.24	13.39	25.82	15.20	10.60	1.91	0.36	0.07	67.81
	B	0.1	0.1	0.1	0	0.4	19.7	38.1	22.4	15.6	2.8	0.5	0.1	
	C	0.2	0.2	0.1	0.1	0.4	10.4	21.7	19.4	11.3	2.2	0.6	0.1	66.7
Pardi	A	0.11	0.10	0.03	0.04	0.27	13.85	28.93	17.34	10.81	1.70	0.33	0.95	73.56
	B	0.1	0.1	0	0.1	0.4	18.8	39.3	23 6	14.7	2.3	0.4	0.1	
	C	0.2	0.2	0	0.1	0.4	10.7	22.7	21.6	12.7	2.2	0.6	0.2	71.6
Dharampur	A	0.14	0.13	0.04	0.03	0.30	13.36	36.50	24.78	11.83	2.17	0.36	0.06	89.70
	B	0.2	0.1	0	0	0.3	14.9	40.7	2.6	13.2	2.4	0.4	0.1	
	C	0.3	0.3	0.1	0.1	0.6	11.5	24.6	24.2	13.3	2.5	0.6	0.2	78.3

Station		January	February	March	April	May	June	July	August	September	October	November	December	Annual
Sachin	A	0.12	0.06	0.01	0	0.21	9.00	18.06	8.15	6.04	1.69	0.36	0.06	43.76
	B	0.3	0.1	0	0	0.5	20.6	41.3	18.06	13.8	3.9	0.8	0.1	
	C	0.2	0.2	0	0	0.3	7.9	16.7	13.01	8.2	1.8	0.4	0.1	43.9
Bansda	A	0.16	0.12	0.04	0.03	0.26	10.40	32.30	19.86	11.20	1.7	0.50	0.06	76.66
	B	0.2	0.2	0.1	0.1	0.3	13.06	42.1	25.09	14.06	2.38	0.7	0.1	
	C	0.2	0.2	0.1	0	0.6	10.5	24.1	23.02	13.4	2.3	0.7	0.1	75.5
Navsari	A	0.03	0.07	0.03	0	0.07	12.38	21.48	9.90	7.21	2.06	0.63	0.13	53.94
	B	0.1	0.1	0.1	0	0.1	22.9	39.7	18.4	13.04	3.08	1.2	0.2	
	C	0.1	0.2	0.1	0	0.3	8.9	19.6	14.7	8.1	2.4	0.8	0.3	55.5
Mangrol	A	0.01	0.07	0	0.02	0.15	7.44	17.57	8.84	6.63	1.86	0.60	0.15	43.43
	B	0	0.2	0	0.1	0.3	17.1	40.5	20.04	15.3	4.3	1.4	0.3	
	C	0	0.2	0	0.2	0.2	8.4	18.1	13.5	8.0	2.06	1.0	0.4	52.6
Songadh	A	0.01	0.08	0.01	0.07	0.38	7.91	23.76	13.51	8.66	2.55	0.49	0.11	57.54
	B	0	0.1	0	0.1	0.7	13.7	41.3	23.5	15.1	4.4	0.9	0.2	
	C	0	0.2	0.1	0.2	0.7	8.9	24.6	21.00	10.8	2.5	0.6	0.2	69.8
Surat District	A	0.10	0.09	0.03	0.02	0.22	9.98	23.41	12.76	8.35	1.80	0.42	0.08	57.26
	B	0.2	0.2	0.1	0	0.4	17.4	40.9	22.3	14.6	3.1	0.7	0.1	
	C	0.2	0.2	0.1	0.1	0.4	9.1	20.1	17.4	10.0	2.1	0.6	0.2	60.5

A—Normal Rainfall in inches; B—Monthly Rainfall as % of annual; C—Normal number of rainy days (A rainy day is one of 0.10" or more)

FREQUENCY OF ANNUAL RAINFALL IN SPECIFIED LIMITS—PERIOD 1901—1950

	Surat	Olpad	Mandvi	Bardoli	Valod	Jalalpur	Chikhali	Bulsar	Pardi	Dharampur	Sachin	Bansda	Navsari	Mangrol	Songadh
5.01— 10.00 ...	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—
10.01— 15.00 ...	1	2	—	—	—	1	—	—	—	—	—	—	—	—	—
15.01— 20.00 ...	4	3	—	1	—	1	—	—	—	—	4	—	1	1	—
20.01— 25.00 ...	1	6	2	1	—	3	—	—	—		2	—	—	—	—
25.01— 30.00 ...	7	3	1	3	1	2	—	1	—	—	1	—	—	2	—
30.01— 35.00 ...	3	9	4	4	3	4	—	3	—		6	—	1	—	1
35.01— 40.00 ...	6	6	5	1	3	1	7	—	3	—	6	2	—	3	—
40.01— 45.00 ...	9	8	5	1	6	8	1	5	2	1	5	1	4	6	4
45.01— 50.00 ...	1	6	4	14	4	2	6	2	3	2	4	6	1	3	2
50.01— 55.00 ...	7	4	11	3	10	3	3	1	3	2	6	—	3	3	1
55.01— 60.00 ...	6	1	4	6	4	5	3	4	1	2	5	5	1	1	4
60.01— 65.00 ...	2	—	4	2	6	7	7	4	5	2	3	5	5	1	3
65.01— 70.00 ...	3	—	2	6	4	4	3	5	2	2	1	5	—	—	2
70.01— 75.00 ...	—	1	1	4	2	5	4	5	7	2	1	2	2	1	—
75.01— 80.00 ...	—	—	4	2	1	3	2	2	6	2	2	6	2	—	1
80.01— 85.00 ...	—	—	2	2	5	—	2	2	5	7	—	5	3	1	2
85.01— 90.00 ...	—	—	—	—	—	—	4	3	4	2	1	2	—	—	1
90.01— 95.00 ...	—	—	—	—	1	—	2	4	4	5	—	3	—	—	1
95.01—100.00 ...	—	—	—	—	—	—	1	4	3	2	1	2	—	1	1
100.01—110.00 ...	—	—	—	—	—	—	4	3	2	5	—	2	—	—	—
110.01—120.00 ...	—	—	1	—	—	—	1	2	—	2	—	3	—	—	—
120.01—130.00 ...	—	—	—	—	—	—	—	—	—	5	—	1	—	—	—
130.01—140.00 ...	—	—	—	—	—	—	—	—	—	4	—	—	—	—	—
140.01—150.00 ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
150.01 and above ...	—	—	—	—	—	1	—	—	—	3	—	—	—	—	—
No. of years ...	50	50	50	50	50	50	50	50	50	50	48	50	23	23	23
Mean rainfall in inches ...	41.98	35.66	52.91	52.79	56.23	52.97	66.64	71.08	72.34	94.87	46.52	74.02	58.16	48.23	61.76
Standard Deviation ...	14.64	12.80	17.49	16.02	15.45	21.95	21.59	22.84	18.07	30.12	18.62	21.60	17.29	17.24	17.73
Coefficient of variability ...	34.87	35.89	33.06	30.35	27.48	41.44	32.40	32.13	24.98	31.75	40.03	29.18	29.73	35.75	28.71
Highest Rainfall (inches) ...	69.53	74.42	113.75	84.49	90.53	150.87	115.61	114.56	104.09	167.71	98.92	128.42	84.74	97.60	97.57
Highest rainfall as % of mean ...	165.06	208.07	215.00	160.00	161.00	284.08	173.05	161.02	143.09	176.08	212.06	173.05	145.07	202.04	158.00
Lowest rainfall in inches ...	14.29	9.50	21.04	19.51	25.53	13.84	35.26	29.29	36.05	44.35	15.19	38.02	18.93	19.01	30.57
Lowest rainfall as % of mean ...	34.00	26.06	39.08	37.00	45.04	26.01	52.09	41.02	49.08	46.07	32.07	51.04	32.05	39.04	49.05

CHAPTER 1.

Physical Features

RAINFALL

Information about the rainfall of the district is based on data from 15 raingauge stations. Rainfall records for over 50 years are available for all these stations in the district except Navsari, Mangrol and Songdh.

The normal monthly and annual rainfall and rainy days for all the raingauge stations using records up to 1940 are given in Table 1. Monthly rainfall expressed as percentage of the annual is also given in the table.

The district receives its rainfall entirely from the Arabian sea branch of the monsoon current. The monsoon usually arrives in the second week of June and lasts till the end of September.

Rainfall in the district increases as one proceeds from the coastal plain towards the hilly tracts in the east. It also increases from north to south. Olpad near the coast in the extreme north-west of the district gets the lowest annual rainfall of 36" while the hilly area near Dharampur in the south gets the highest annual rainfall of 90". The number of rainy days in a year varies from 43 at Olpad to 78 at Dharampur. A rainy day for this purpose is taken as one with 10 cents or more.

The annual average rainfallof the district is 57". 98 % of the annual rainfall occurs during the moths June to October. October, however, accounts for only 3% of the annual. July with 40% of the annual rainfall is the rainiest month of the year, with August (20%) coming next.

Table 2 shows the frequencies of annual rainfall in specified limits for all the 15 raingauge stations during the period 1901 to 1950. This table also gives the mean, the standard deviation, the values of lowest and highest rainfalls recorded during the period and the coefficient of variability for each of the stations.

The district is characterised by extremely large fluctuations of rainfall both in space and time. The north-western part of the district gets less than half the rainfall in the south near Dharampur. The northern half of the coastal belt is the most variable. Olpad had as low an annual rainfall as 9.5" (27% of average) while Jalalpur got as much as 285% of the average in one year. According to available records, the annual total rainfall in the district has not so far fallen below a fourth of the average or exceeded three times the average. At most of the stations the lower and upper limits have been between one third of the average and twice the average respectively. The coefficient of variability ranges from 25 % at Pardi to 41% at Jalalpur.

Special mention may be made about the rainfall of Jalalpur in 1950 when it recorded 150. 87", which is about 285% of its average. The rainfall was concentrated in the months July and

September. July got 51.07" in 27 days against a normal of 20.78." June rainfall was 2.00" against a normal of 9.54" and in August it was 3.50" against a normal of 9.24". In September Jalalpur received in 18 days a rainfall of 93.59" averaging more than 5" in a day. The normal rainfall of September is only 7.03". The highest rainfall recorded during the period 1901-1950 next to the year 1950 was in 1946 when it received 78. 30 " of rainfall (148 % of average) .

Annual rainfall within 10% of the average is termed normal and 11 to 25% in slight excess or defect according to sign. Table 3 below shows the years during 1901 to 1950 when the annual rainfall in each of two or more consecutive years was less than 90% of the average and less than 75% of the average respectively.

TABLE No. 3

INSTANCES OF TWO OR MORE CONSECUTIVE YEARS WHEN RAINFALL WAS LESS THAN 90% AND 75% OF THE NORMAL

Surat	Olpad	Mandvi	Bardoli	Valod	Jalalpur	Chikhali
Less than 90% of Normal						
1904	1903	1901	1904	1904	1904	1904
1905	1904	1902	1905	1905	1905	1905
1906	1905		1928	1915	1906	1906
1910	1906	1904	1929	1916	1910	1907
1911	1907	1905			1911	1924
1918	1923	1915		1934	1918	1925
1919	1924	1916		1935	1919	1927
1920	1925	1928		1936	1920	1928
		1929		1947		1929
1947				1948	1927	
1948		1948			1928	1934
		1949			1935	1935
		1950			1936	1936
					1947	
					1948	
Less than 75% of Normal						
1904	1904	1904	1904	1904	1904	9041
1905	1905	1905	1905	1905	1905	1905
1906				1947	1906	1924
				1948		1925
						1927
						1928

TABLE No. 3 (Continued)

Bulsar	Pardi	Dharampur.	Sachin	Bansda	Navsari	Mangrol	Songadh
Less than 90% of Normal							
1904	1904	1903	1901	1904	1935	1928	1928
1905	1905	1904	1902	1905	1936	1929	1929
1906	1906	1905	1904	1906	1938	1930	1935
1910	1923	1906	1905	1915	1939	1931	1936
1911	1924	1909	1906	1916	1947	1935	1947
1923	1925	1910	1907	1923	1948	1936	1948
1924	1935	1911	1910	1924		1937	
1925	1936	1915	1911	1925			
1927		1916	1918				
1928		1924	1919	1927			
1929		1925	1920	1928			
		1927	1927	1929			
		1928	1928	1930			
		1929	1935	1935			
		1930	1936	1936			
Less than 75% of Normal							
1904	1904	1904	1904	1905	1935	1935	1928
1905	1905	1905	1905	1906	1936	1936	1929
1924		1906	1910	1928			
1925		1915	1911	1929			
		1916					

There have been a number of occasions at each of the 15 stations when the annual rainfall was in slight defect for two or more consecutive years.

It may be seen that the years 1904 and 1905 were years of bad rainfall throughout the district, with less than 75 % of the average. The figures of annual rainfall at the various stations show that good or bad rainfall at any station is also an indication of good or bad rainfall at the other stations in the district though not proportionately with regard to the amount of rainfall. As instances may be mentioned the years 1944 to 1946 when all the stations had good rainfall and the years 1904 to 1906 when all the stations got very low rainfall.

Table 4 gives decade averages of rainfall for all the 15 stations for the period 1901-1950.

TABLE No. 4

ANNUAL RAINFALL—DECADE AVERAGES.

Station	1901-10	1911-20	1921-30	1931-40	1941-50	50 Years period 1901-1950
Surat ...	35.40	39.83	42.07	47.00	45.61	41.98
Olpad ...	30.03	37.31	34.36	39.35	37.25	35.66
Mandvi ...	46.15	49.69	53.19	55.66	59.85	52.91
Bardoli ...	46.12	53.01	53.28	53.69	57.85	52.79
Valod ...	51.59	52.27	56.25	58.34	62.69	56.23
Jalalpur ...	43.94	47.72	52.25	54.09	66.87	52.97
Chikhali ...	56.68	64.05	62.61	70.42	79.45	66.64
Bulsar ...	60.88	67.47	68.01	80.80	78.25	71.08
Pardi ...	66.59	72.99	69.72	74.21	78.18	72.34
Dharampur ...	76.67	83.80	85.00	110.11	118.79	94.87
Sachin ...	35.46	43.65	44.65	52.39	58.91*	46.52**
Bansda ...	71.15	74.74	60.11	73.15	90.95	74.02
Navsari ...	—	—	—	55.37	61.98	58.16‡
Mangrol ...	—	—	—	44.58	54.24	48.23‡
Songadh ...	—	—	—	60.54	67.32	61.76‡

The average annual frequencies of the number of days of rainfall in different ranges based on the data of 20 years (1931-1950) for four re-presentative stations Surat, Navsari, Bansda and Dharampur are given in table 5 below. The percentage number of days in each range is also given in the table.

TABLE No. 5

*AVERAGE ANNUAL FREQUENCIES OF RAINFALL (NO. OF DAYS) IN DIFFERENT RANGES (BASED ON DATA OF 20 YEARS 1931-1950)

Range	Surat	%	Navsari	%	Bansda	%	Dharampur	%
0 ...	292.4	80.1	280.7	76.9	271.0	74.2	267.6	73.3
0.01— 0.10 ...	25.9	7.1	30 2	8.3	22.0	6.0	20.2	5.5
0.11— 0.20 ...	11.9	3.3	13.1	3.6	14.2	3.9	12.7	3.5
0.21— 0.50 ...	14.3	3.9	16.6	4.5	21.3	5 8	20.7	5.7
0.51— 1.00 ...	8.5	2.3	9.9	2.7	14 7	4.0	16.5	4.5
1.01— 2.00 ...	6.1	1.7	7.0	1.9	11.5	3.1	12.4	3.4
2.01— 3.00 ...	3.1	0.8	3.1	0.8	5.3	1.5	5.3	1.5
3·01— 4.00 ...	1.0	0.3	1.8	0.5	1.4	0.4	3.0	0.8
4.01— 5.00 ...	1.0	0.3	1.1	0.3	1.3	0.4	2.1	0.6
5.01— 6.00 ...	0.4	0.1	1.0	0.3	0.7	0.2	1.6	0.4
6.01— 7.00 ...	0.1	0.	0.3	0.1	0.7	0.2	1.1	0.3
7.01— 8.00 ...	0.1	0.	0.1	0.	0.5	0.1	0.9	0.2
8.01— 9.00 ...	0.1	0.	0.1	0.	0.3	0.1	0.3	0.1
9.01—10.00 ...	0.	0.	0.1	0.	0.1	0.0	0.4	0.1
10.01 and over ...	0.1	0.	0.2	0.1	0.3	0.1	0.7	0.2

*Average of 8 years.
**Avgrage of 23 years.
‡Average of 48 years.

CHAPTER 1.

Physical Features

RAINFALL

As has already been mentioned, the number of rainy days increases from northwest to southeast. Dharampur has as many as 87 rainy days of 1 cent or more in a year, most of which is accounted for by the months June to September. The average amount of rainfall in the district in a rainy day of 1 cent or more, varies from .5" to .9". If rainy days of 10 cents or more only are taken into consideration, the average amount of rainfall on such a day would be about 1.1" in the district. Heavier falls than 1" in a day are frequent and the Dharampur area receives more than 1" on 26 days in the year.

Table 6 gives the frequencies of number of days of heavy rainfall over 3" in different ranges at 12 stations in the district. The frequency varies from two days in a year in the extreme northwest to six near Dharampur.

TABLE No. 6

FREQUENCY OF HEAVY RAIN (PERIOD 1891-1920)

Station	3" to 4"	4" to 5"	5" to 6"	6" to 7"	7" to 8"	8" to 9"	9" to 10"	10" to 11"	11" to 12"	12" to 13"	13" to 14"	14" to 15"
Surat	34	16	15	3	—	—	—	1	1	—	—	1
Olpad	29	13	8	8	1	1	2	—	—	1	—	—
Mandvi ...	35	19	15	8	1	1	—	—	—	1	—	—
Bardoli *(a)* ...	41	21	16	6	2	1	2	—	—	—	—	1
Valod ...	52	26	6	10	4	3	—	1	2	—	—	1
Jalalpur *(b)* ...	52	27	14	9	5	3	2	—	—	—	—	—
Chikhal ...	55	42	18	12	5	4	2	1	1	—	—	—
Bulsar ...	69	33	19	14	7	7	1	1	1	—	1	—
Pardi *(c)* ...	55	33	19	11	12	4	6	2	1	1	—	—
Dharampur *(d)*	62	40	33	15	15	6	7	3	2	1	—	—
Sachin ...	42	17	8	4	6	2	—	—	—	—	—	1
Bansda *(e)* ...	60	40	21	18	9	9	6	4	1	1	—	1

The amounts of heaviest rainfall in 24 hours with dates, recorded up to the year 1950 at each of the 15 raingauge stations are given in table 7. This table also gives (*a*) the frequency in each of the months June to October when 10" or more of rain occurred in 24 hours at each of the stations and (*b*) the number of occasions of consecutive days with rainfall exceeding 10.00" each day.

(a) 18"—1; *(b)* 25"—1; *(c)* 15"—1; *(d)* 17"—1; *(e)* 15"—1.

TABLE No. 7

HEAVY RAINFALL OVER 10" IN 24 HOURS (PERIOD 1891-1950)

Station	Heaviest fall in 24 hours		No. of occasions of rainfall over 10" in 24 hrs.					Total No. of occasions of rainfall over 10" in 24 hrs.	No. of occasions of consecutive days when rainfall was over 10" each day	
	Amount in inches	Date	June	July	Aug.	Sept.	Oct.		2 days	3 days
Surat	18.08	2-7-1941		6		1	1	8	1	
Olpad	15.08	11-7-1929		2		2		4	1	
Mandvi	15.63	23-9-1945	1	3		1		5		
Bardoli	18.35	28.7-1891	1	3		1		5		
Valod	14.06	3-7-1941		7		1		8	1	1
Jalalpur	25.85	28-7-1891		5		2		7	1	
Chikhali	21.15	2-7-1941	1	7	1			9	1	
Bulsar	16.46	18-8-1944	6	5	1	1		13		
Pardi	15.53	4-9-1892	2	3	2	1		8		
Dharampur	38.87	2-7-1941	1	12	2	1		16	1	
Sachin	15.28	13-7-1929		3				3		
Bansda	20.12	2-7-1941		10	3	1		14	1	
Navsari	30.85	2-7-1941	1	4	1			6	1	
Mangrol	15.20	23-9-1945		2		2		4	1	
Songadh	12.12	22-9-1945				1		1		

Very heavy falls in short periods form an important feature of the rainfall of the district. At all the stations the maximum number of heavy falls of 10" or more in 24 hrs. occurred in the month of July. Sachin had only 3 occasions during the 60-year period 1891-1950 while Dharampur had 16 and Bansda 14.

Of the occasions of very heavy rain, special mention may be made of the exceptionally heavy falls in the early days of July 1941. In association with the depression from the bay of Bengal from 23rd June to 8th July 1941, the Arabian sea branch of the monsoon also strengthened causing very heavy falls over wide areas in the country including Gujarat. The rainfall was concentrated and exceptionally heavy in the coastal strip to the north of Bombay and in Gujarat. Dharampur in the district registered a rainfall of 39" during the 24 hours ending at 08 hrs. on the 2nd, which probably constitutes a world-record for a day for a low level station. The principal amounts recorded at some of the other stations in Surat district are—

Surat 18.1" (2nd), 10.9" (3rd).

Mandvi 15.3" (2nd).

Bardoli 13.4" (2nd).

Valod 13.1", 10.6", 14.1" (1st, 2nd and 3rd respectively).

Jalalpore 14.1", 25.1" (2nd and 3rd respectively).

Chikhali 31.1", 15.9" (2nd and 3rd respectively).

Bulsar 15.2" (2nd).

CHAPTER 1.

Physical Features

RAINFALL

The torrential rainfall associated with this depression resulted in severe floods in the rivers of the Gujarat. Railway traffic was seriously disorganized for nearly a fortnight. A passenger train is reported to have been marooned between Miyagam and Lokhadra on the Western Railway, and as a result of erosion of the track to have fallen over on its side. According to newspaper reports, all telegraphic communication between Bombay and other parts of India was temporarily cut off and the telegraphic service was also badly disorganized.

The excessive floods were responsible for heavy loss of livestock and property. The districts of Broach and Surat suffered most heavily in this respect. Standing crops were lost and rich fruit gardens ruined. Several villages are also reported to have been washed away. A number of big bridges collapsed as a result of the floods. The severity of the floods may be gauged from the fact that a 60 feet iron girder of a bridge was carried about 150 feet by the floods.

Temperature

TABLE No. 8

MEAN TEMPERATURE AND THE HIGHEST AND LOWEST TEMPERATURE

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
***Mean Daily Maximum Temperature in °F**													
	86.8	89.4	96.1	99.1	97.3	92.8	87.2	86.5	88.7	94.1	91.9	87.9	91.5
***Mean Daily Minimum Temperature in °F**													
	57.8	60.0	67.0	73.7	78.9	79.9	77.8	77.0	75.9	72.1	64.9	59.4	70.4
‡Highest Maximum Temperature in °F with dates.													
	100	105	111	113	113	114	102	99	102	106	102	100	114
Date	31	27	28	27	6	10	7	31	23	13	2	7	30
	1932	1948	1945	1901	1881	1901	1902	1932	1948	1899	1901	1944	1938
‡Lowest Minimum Temperature in °F with dates.													
	40	42	51	59	67	71	69	70	69	58	51	44	40
Date	31	1	3	3	4	17	23	14	9	20	19	27	20
	1929	1929	1898	1903	1888	1916	1889	1887	1884	1882	1881	1903	1893
***Mean Diurnal Range of Temperature in °F.**													
	29.0	29.4	29.1	25.4	18.4	12.9	9.4	9.5	12.8	22.0	27.0	28.5	21.1

The heavy rainfall of 11th to 13th July 1929 was another noteworthy instance. During these three days 13 raingauge stations out of the 15 in the district recorded more than 10.00" of rain in 24 hours. Olpad recorded 15.08" on the 11th July. Similarly Sachin had its heaviest rainfalll on record of 15.28" on 13th July 1929.

*Based on data for 1881 to 1940.

‡Based on data for 1881 to 1950.

CHAPTER 1.

Physical Features.

Temperature.

The description of temperature and other weather conditions (excepting rainfall) of the district is mainly based on the data of Surat which has records extending over seventy years. The district lies in an area of high temperatures. Maximum temperatures of 100° For more have been recorded on individual days in all the months of the year excepting August which has recorded 99° F. The district is an area where the highest maximum temperature recorded on an individual day during the last seventy years has not exceeded 115° F. The highest Surat has recorded is 114° F on 10th June 1901. The annual mean maximum temperature is 91° F and mean minimum temperature 70° F.

Temperatures begin to rise by the end of February with scorching conditions in April and May which are the hottest months of the year. The mean maximum temperature in these months ranges from 97° to 99° F indicating a large number of days of maximum temperature with 100° F and above. With the onset of the monsoon in the second week of June, there is a welcome fall of temperature which continues till August. The trend is reversed and there is a sharp rise temporarily in October which has a mean maximum temperature of 94° F.

From November, with the onset of winter conditions, there is a large fall of temperature. The months December to February have a mean minimum temperature ranging from 57 to 60° F and mean maximum temperature from 88° to 90° F. January is the coldest month of the year with a mean minimum temperature of 58° F. The lowest minimum temperature recorded at Surat is 40° F.

The diurnal variation of temperature is maximum in the winter months, the mean being of the order of 30° F. On individual days the range of temperature may be of the order of 40°F to 45° F. It is least in the monsoon months with the mean being less than 10° F in July and August. The annual mean range of temperature is 21 °F.

Humidity

Relative Humidity is maximum in the early morning and decreases with the advance of the day attaining a minimum during the hottest period in the afternoon and again increases towards evening. The lowest humidities occur during the winter and summer months November to April. The morning avarage is 60% and the afternoon 30%. On individual days it may be as low as 10 per cent. Humidity increases with the pronounced south-westerly sea-breeze in May in the afternoons and remains high throughout the monsoon months till September when it decreases. The average relative humidity in the morning is 80 to 85% and in the afternoon 70 to 75%. The diurnal variation of humidity is least in the months of July and August. On individual days in these months, humidity may be as high as 100%.

CHAPTER 1.

Physical Features

TEMPERATURE

The monthly and annual means of dry and wet bulb temperatures, relative humidity and vapour pressure for 8 and 17 hours at Surat are given in the table below.

TABLE No. 9.

THE MONTHLY AND ANNUAL MEAN OF DRY AND WET BULBS TEMPERATURES

Hrs. I.S.T.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
Mean Dry Bulb Temperature in F°													
0800	62.6	65.5	73.8	81.5	82.2	84.2	81.2	80.0	79.7	78.9	72.5	65.2	75.9
1700	84.6	85.9	91.7	95.7	91.8	87.9	84.4	84.5	86.0	92.8	88.9	85.1	88.3
Mean Wet Bulb Temperature in F°													
0800	55.6	58.4	65.7	73.1	77.5	78.7	78.0	76.6	76.1	72.1	64.1	57.8	69.5
1700	66.2	68.1	70.1	73.2	78.5	79.6	78.7	77.7	77.7	74.8	70.2	66.7	73.5
Mean Relative Humidity (%)													
0800	62	63	63	65	69	77	86	85	84	71	61	61	71
1700	34	37	30	33	54	68	76	73	68	43	38	35	49
Mean Vapour Pressure in Millibars.													
0800	12.2	13.5	17.7	23.6	28.0	30.8	30.9	29.8	28.9	23.7	16.4	13.1	22.4
1700	13.5	15.1	15.2	17.6	26.9	30.2	30.7	29.4	28.3	20.9	16.7	13.9	21.5

Note.—Means for 0800 hrs. are based on 50 years' data and those for 1700 hrs on 5 years' data.

Cloudiness

The mean cloudiness in tenths of sky covered is given below.

TABLE No. 10.

MEAN CLOUD AMOUNT (IN TENTHS OF SKY)

Hrs. I.S.T.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
All clouds.													
0800*	1.5	1.3	1.3	1.9	3.7	7.1	8.6	8.6	6.5	2.7	1.7	1.6	3.9
1700‡	2.7	2.0	2.0	1.9	1.8	6.0	8.5	7.8	5.6	3.0	2.9	2.3	3.9
Low clouds.													
0800‡	0.5	0.5	0.5	0.8	3.2	6.1	7.4	6.8	5.2	1.2	1.0	0.5	2.8
1700‡	0.5	0.4	0.6	0.7	0.8	3.9	6.2	5.4	3.9	1.4	1.4	0.7	2.2

November to April are practically months of clear and cloudless skies. The average amount is generally less than 2/10 of the sky. During the monsoon months of July and August more than ten days in each month are days of overcast skies.

Surface Wind

Light winds mainly from the north to east directions blow throughout day and night during November and December. Similar winds prevail during the mornings in January to March also but, in the afternoons, they blow from a westerly directions (sea-breeze). In April as well as in October the winds are vari-

*Based on 50 years' data. ‡Based on 5 years' data.

able: From May to September southwesterly winds from the Arabian Sea prevail.

The mean daily wind speed is a maximum (7 m.p.h.) in the months May to August and 3 to 4 m.p.h. in the other months.

TABLE No. 11(*a*)

PERCENTAGE NUMBER OF DAYS OF WIND FROM DIFFERENT DIRECTIONS

Directions	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
I. 0800 hrs. I. S. T. (based on 20 years' data).													
N	26	27	25	22	6	2	1	2	10	16	11	17	15
NE	19	18	10	8	2	1	1	0	3	13	22	23	10
E	20	15	6	2	1	1	1	0	3	17	36	31	11
SE	6	6	7	5	3	7	4	3	5	10	10	8	6
S	3	6	12	21	29	27	21	14	13	10	2	2	13
SW	0	1	7	13	31	33	34	33	12	3	1	1	15
W	2	1	3	4	13	20	25	32	22	2	0	0	10
NW	6	7	7	7	3	4	6	7	11	3	2	3	5
Calm	17	19	23	18	12	5	6	9	22	24	16	15	15
II. 1700 hrs. I. S. T. (Based on 5 years' data).													
N	12	6	8	5	1	0	0	0	3	11	19	21	7
NE	7	4	3	1	0	0	0	0	2	16	30	23	7
E	3	1	0	0	0	0	0	0	1	11	9	6	3
SE	0	1	0	1	1	3	0	0	1	3	2	2	1
S	1	10	9	15	31	40	32	30	27	10	1	1	17
SW	16	29	24	34	50	49	57	60	48	16	13	6	34
W	32	28	28	25	13	7	9	10	12	16	14	19	18
NW	27	20	27	19	4	1	2	0	5	14	9	17	12
Calm	2	1	1	0	0	0	0	0	1	3	3	5	1

TABLE No. 11(*b*)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
Mean Wind Speed in M.P.H. (Means of 60 years).													
	2.8	3.2	3.3	4.2	6.6	7.4	7.3	5.9	3.8	2.6	2.8	2.7	4.4
Mean Wind Direction.													
0800 hrs. I.S.T.	N41E	N37E	N17E	S81W	S37W	S39W	S58W	S61W	S80W	N74E	N72E	N62E	S33W
1700 hrs. I.S.T.	N67W	S82W	N87W	S72W	S38W	S27W	S35W	S36W	S40W	N55W	N3E	N15W	S63W

CHAPTER 1.
Physical Features
TEMPERATURE

Weather Phenomena

The following table gives the number of days of thunder and fog.

TABLE No. 12

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
Thunder	0	0	0.3	0.1	0.3	1.6	0.4	0.4	1.3	0.5	0	0	5
Fog	0.5	1.0	0.3	0	0	0	0	0	0	0.5	0	0.1	2

On an average there are five days of thunder in a year. They are mainly during the months of June and September together accounting for three days. This district like other districts of Gujarat has few days of thunderstorms.

Fog occurs on an average on two days in a year mainly in the months of January and February.

FOREST.

The district has extensive forests but they are mostly in the eastern part. On the western side, which abuts the Arabian Sea, there are practically no forests. The total forest area for the whole district would be near about 1,156 sq. miles. In the south-east the areas are very hilly ranging from steep to precipitous slopes which are all well clothed with vegetation.

Types of forests.

The type of vegetation in this district is mainly governed by rainfall. The rainfall goes on decreasing from the south to the north. Two types of forests are encountered, viz. (1) moist deciduous in Dharampur, Bansda. Vyara, Songadh and other southern talukas and (2) dry deciduous in Mandvi and Mangrol talukas. The transition from moist deciduous to dry deciduous is not very conspicuous as the notrthern forests are not very typically dry deciduous. The proportion of the valuable species, teak, is round about 25% in the most deciduous forests while in the dry deciduous forests, it is much higher. The forests of Vyara, Songadh, Mandvi and Mangrol talukas have been worked on longer rotations in the past and hence they produce large sized timber wheras the forests of Dharampur and Bansda talukas have been worked on smaller rotations in the past and hence they have only small sized timber at present. However they are capable of producing large sized timber if worked on longer rotations.

Sadada (*Terminalia tomentosa*) is the dominant species in general. Its incidence is heavier in the western talukas. Teak comes next and its incidence increases from south to north. However, the southern talukas are more favourable for large sized growth of teak and other timbers. Other usual associates of teak and sadad, viz., *shissum*, *tanachha* biyo etc. occur in the canopy.

Understorey and Ground cover.

There are a number of species in the under storey and ground cover. However, most of these are unimportant from the commercial point of view. Asotri (*Bauninia racemosa*), Chilar (Acacia Intsia), bamboos and grasses are the important species. Bamboos and grasses are in greater abundance in the western talukas. The quality of grass is very inferior and in times of plenty cattle are not likely to relish this grass. Various medicinal herbs occur in the southern talukas.

Dharampur taluka

This taluka is full of forests. These forests have not yet been classed as reserved or protected forests under the Indian Forest Act. The forest area is estimated to be round about 300 sq. miles. The practice of shifting cultivation which was in vogue in the past has greately damaged the quality of the forests particularly on the higher slopes and plateaus. The forests are moist deciduous. Bamboos are in abundance. Communications in the forest areas are not satisfactory. The present forest crop is full of croked and unsound trees.

Bansda taluka.

There are about 86 sq. miles of forest in this taluka. These are not classed as reserved or protected forests under the Indian Forest Act. Most of these are on high hills. Forest growth in general, is young and is promising. The forests are moist deciduous. Bamboos are in abundance, communications in the forest areas are not satisfactory.

Chikhali, Pardi Mahuva and Gandevi talukas.

Forest areas in these talukas are very little and they range from less than one to about ten sq. miles. The forest are mostly of the drier type and are badly hacked because of the heavy pressure of population. Bamboos are practically absent. The forest area in the talukas of Chikhali, Mahuva and Gandevi are 5.9, 10.19, 0.7 sq. miles respectively.

Vyara and Songadh talukas.

These are very valuable forests and the incidence of large sized timber trees is quite high. The forest range from moist deciduous to dry deciduous types, Bamboos are in abundance. Communiction on they whole are fairly satisfactory. There are about 89.7 sq. miles of forests in Vyara Taluka and 347.7 sq. miles in Songadh talukas. These forests were constituted into reserved and protected forests during the Baroda State regime.

Mandvi and Mangrol talukas.

The forests are mainly of the dry deciduous type. The aera is less hilly. Medium sized timber and poles are the principal products,. The incidence of bamboos is fair. The forest of Mandvi taluka have been constituted into reserved and protected forests of the Indian Forest Act. There are 63.50 sq. miles of reserved forests and 9.0 sq. miles of unclassed forests in Mandvi Taluka. In the Mangrol taluka, foerest have been classed into reseved and protected forest during the Baroda state regime. There are 104.6 sq. miles of reserved forests and 13 sq. miles of unclassed forests in the taluka (in all 117 sq. miles).

CHAPTER 1.
Physical Features
FOREST
Forest Products.

The major and minor forest products are listed below :—

Major Produce :—Large and medim sized timbers and poles, firewood and charcoal

Minor produce :—

(1) Bidi leaves of Asotri (Bauhenia racemosa)
(2) Bark of chilar (Acacia Intsia)
(3) Gums of various species
(4) Fruits and flowers of(Madhuka latifolia) Mahuda.
(5) Fruits of Karnaj (Pongamia glabra).
(6) Bamboos-Kastel and Bambosa arundinacca) Manvel. (Dendrocalamus strictus)

The following is a list of important trees met with in the forests.

Chief Trees Found In Surat District.

The following is a list of important trees met with in the forests.

(1) Asok	(*Polyaltha longfolia*).
(2) Shitafal	(*Anona Squamosa*)
(3) Ramphal	(*Anona Recticulata*)
(4) Umbh (Kirma)	(*Seccopetalum tomentosum*)
(5) Galo	(*Tinospora cordifolia*)
(6) Kokam	(*Garcinaia indica*)
(7) Kolap Vrukash (Ruberado)	(*Adansonia digitala*)
(8) Samar	(*Bombax Malabaricum*)
(9) Kadayo	(*Sterculia Ures*)
(10) Dhamani (Phalsa)	(*Greia tiliaefolia*)
(11) Chopadi (Dhaman)	(*Grewia pilosa*)
(12) Khar-Dhamni	(*Grewia Microcos*)
(13) Kanirakui	(*Averhoa Caramobola*)
(14) Mithdo Limbdo	(*Murrya Koenigii*)
(15) Bijori	(*Citrus Medica*)
(16) Limbu	(*Citrus Medica*)
(17) Narangi	(*Citrus Medica*)
(18) Kothi (Kat-bel)	(*Feronia Elephantum*)
(19) Bili	(*Aegle Marmelos*)
(20) Arduso (Maha-Puna)	(*Ailantus excelsa*)
(21) Hingori	(*Balanites Roxburghii*)
(22) Kakad	(*Garuga Pinnata*)
(23) Bakain-Limbdo	(*Melia Azedarch*)
(24) Limbdo	(*Melia Composita*)
(25) Limbdo	(*Azadirracgta indica*)
(26) Reyan	(*Soymida februifuga*)
(27) Mechogani	(*Sweitinia Mahagani*)
(28) Achhaval	(*Ventilago Maraspatana*)
(29) Bordi	(*Zizyphus trinervia*)
(30) Ghat-bor	(*Tiziphus xyopyra*)
(31) *Kosam*	(*Scheichera trijuga*)

(32) Arithi (Soap-nut)	(*Sapindus Laurifolius*)
(33) Ambo (Mango-tree)	(*Mangifera indica*)
(33) Kaju	(*Anacardium occidentale*)
(34) Charoli	(*Buchanania latifolia*)
(36) Modad	(*Lannea grabdis*)
(37) Saragave	(*Moringa pterygosperma*)
(38) Agashiye	(*Sesbania grandiflora*)
(39) Tanachha	(*Ougeinia dalbergicldes*)
(40) Khakhar	(*Butea froundosa*)
(41) Shisham	(Dalbergia latifolia)
(42) Patrali	(*Dalbergia lanceolaria*)
(43) Biyo	(*Pterocarpus Marsupium*)
(44) Karanj	(*Pongamia glabra*)
(45) Chillar	(*Acacia instsia*)
(46) Gulmohor	(*Poinciana regia*)
(47) Vilayati Baval	(*Parkinsonia aculsata*)
(48) Awal	(*Cassia auriculata*)
(49) Amali	(*Tamarindus indica*)
(50) Asitro	(*Bauhinia racemosa*)
(51) Khijado	(*Prosopis spicigera*)
(52) Babul	(*Acacia arabica*)
(53) Gorado	(*Acacia Suma*)
(54) Khair	(*Acacia Catechu*)
(55) Kelia	(*Albizzia Procera*)
(56) Siras	(*Albizzia lebbek*)
(57) Bahedo	(*Terminalia bellerica*)
(58) Hirda	(*Terminalia chetula*)
(59) Arjun Sadad	(*Terminalia Arjun*)
(60) Sadad	(*Terminalia tomentosa*)
(61) Dhamodo	(*Anogeissus latifolia*)
(62) Jamful	(*Psidium Guyava*)
(63) Jambudo	(*Eugenia Jambolama*)
(64) Kumbh	(*Careya arborea*)
(65) Mehandi	(*Lansonia inermis*)
(66) Bondaro	(*Lagerstrania praviflora*)
(67) Dalam (Aner)	(*Punica granatum*)
(68) Haladwan	(*Adina cordifolia*)
(69) Kalam	(Mitragyana panifolia)
(70) Ali	(*Morinda tinotoria*)
(71) Timru	(*Diospyrus Melanoxylon*)
(72) Karvanda	(*Carissa carandos*)
(73) Gundi	(*Cordia Myxa*)
(74) Sag (Teak)	(*Tectona grandis*)
(75) Sevan	(*Gmelina arborea*)
(76) Chandan	(*Santalum album*)
(77) Asan	(*Bridelia retusal*)
(78) Avali	(*Phykkabthus Emblica*)
(79) Vad	(*Ficus bengalensis*)
(80) Pipod	(*Ficus religisa*)
(81) Pipali	(*Ficus Tsiela*)
(82) Umbro	(*Dixua glomerata*)
(83) Phanas	(*Artocarpus integrifolia*)

CHAPTER 1
Physical Features
Forest

(84) Saru	(*Casurina equisetifolia*)
(85) Khajuri	(*Phoenix sylvestris*)
(86) Nariali	(*Cocos nuafera*)
(87) Tad	(*Borassus flabelifer*)

WILD ANIMALS.

Wild animals : Amongst the wild animals of the Surat district, big game species are of importance, of which the following are found :—

Tiger (*panthera tigris*), *pattiat wagh* ; the leopard or panther (*panthera pardus*), Dipdo or *Nano Wagh* ; Bear (*melursus ursinus*), rinch ; the wolf (*Canis lipis*), waru ; and of the deer family, sambar (*Cervus unicolor*), sambar ; spotted or axis deer or chital (*Axis axis*) ; Barking Deer or mantjac (*Muntiacus muntjak*), pokdi ; four-horned anpelope (*tetraceurs quadricornis*), bekri ; *nilgai* (*boselaphus tragocamelus*), roz ; wild boar (*Sus cristatus*), *dukkar*. These big games species occur in the Mandvi, Vajpur ranges and in the Bansda and Dharampur forest areas.

The tiger is uncommon and is only found in the thicker portions of the forests of the Mandvi and Vajpur ranges and is very rarely seen in Bansda and Dharampur forst areas. The panther is found in all the forest ranges in fair number but is not common. The length varies in both sexes, the female being smaller, measuring from 5' to 7' and the male from 5' to 8' and over. The panther is useful in ridding the villagers of the stray pariah dogs and kills procupines and young wild pigs which ravage the crops. The sloth bear is rarely seen in the forest ranges. Its life is nocturnal ; it comes out from its den only at night and rests during the day in caves on the sides of ravines and rocky crags. It feeds mostly on termites, roots, fruits and also on honey. It is omnivorous in its diet and will even devour repitles, rats and fish. The sloth bear is a dangerous animal to encounter in the jungle as it is short-sighted and short-tempered and will attack on sight. The sambar, chital and other deer are restricted to the remoter forest areas and are not common, being sometimes preyed upon by the tiger and the panther. The hyaena (*hyaena hyaena*), known as *jarakh*, is a scavenger like the jackal (*canis aureus naria*), or *shiyal*, but is striped and larger. It is known to become dangerous at times, when it attacks children, though, as a rule unlike the wolf (*canis lupus*), it is a timid beast.

The fox (*vulpes bengalensis*), or *lokdi*, and jungle cat (*felis chaus*), *rani bilado*, are common everywhere. The leopard cat (*felis bengalensis bengalensis*), *morchitu*, is only found in forest areas. The fox is much smaller than the jackal, and is of grey colour having a bushy and pointed tail tipped with black. The wild dog (*cuon alpinus dukhunesis*), or

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rani kutro, very rearely occurs in the forest areas and this is also the case with the wolf which wanders into the open barren land and rocky hills. The ratel (*Mellivora indica*), or *ghorkhodio*, which is a sort of honey badger, is more nocturnal than the bear and may only be seen in the forest areas after midnight.

In the rivers, otter (*lutra lutra*), or *panini biladi* or *jalood*, also *jal-manus*, is, at times, seen and is becoming scarce as is the *mugger* or marsh crocodile (*c.* palustris). The otter feeds upon fish and aquatic life and is considered one of the most amusing animals to watch. It has a remarkable propensity for swimming and diving swiftly and at all angles.

The rhesus-monkey (*macaca mulatta*), or *kelyeu*, and the *langur* (*semnopithecus entellus*), or *vandara*, occur in the wooded parts of the district.

Among smaller mammals, mongooses and civet cats are common, the latter being only seen during the night.

There are many rodents of various kinds, large and small; but mention must be made of two. One is the Indian Giant or Malabar squirrel (*ratufa indica*), the size of a hare with a bushy tail, and light greyish brown in colour and the other is flying squirrel (*petaurista phillipensis*), seen only at dusk. Both of these are tree-dwellers and are found only in the remoter and thicker forest areas of the district.

An extraordinary mammal which is seldom encountered is the indian pangolin (*manis crassicandata*). This nocturnal ant-eater is only found in the thicker forest areas of the district. It sleeps during the day in a burrow, curled up like a ball. At night it comes out and feeds on termites and ants by putting out its long, slim, string-like glutinous tongue on which insects get caught, and are sucked in. The digging power of this toothless mammal or *bhingaroo*, as it is known locally, is remarkable, for it can disappear into the earth even in hard soil within a very brief time.

Of the four-footed game mammals, the hare (*lepus nighricolles*) or *saslo*, is a common and a popular small game species.

WILD BIRDS

Wild Birds: In the game birds, ducks come in large numbers in the winter season and are found throughout the district. Of these migratory ducks, the following are found :—

Mallard (*anas platyrhynchos*); shoveler (*anas clypeata*; pintail (*anas acuta acuta*); gadwall (*anas strepera*); wigeon (*Anas penelope*); Garganey Teal (*Anas querquedula*); common teal (*anas crecca crecca*); common pochard (*aythya ferin*

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tufted pochard (*aythva fuligula* ; red-crested pochard (*netta rufina*) ; white-eyed pochard (*aythya nyroca*) ; and brahminy duck (*Tadorna ferrugines*). The resident ducks comprise nukhta or comb duck (*sarkidiornis malamotos*), which is the largest and in the size of a goose. The male acquires a comblike protuberance during the monsoon or breeding season. The spot-bill duck (*anas poecilorhvncha poecilorhynicha*), lesser whistling teal (*dendrocygna javanica*), and the rare cotton teal (*nettapus coromandelianus*), are spread out in various parts of the district where there is a perennial supply of water and are locally migratory. The fantail snipe (*gallinago gallinago gallinago*), pintail snipe (*Gallinago stenura*) and jack shipe (*gallinago minima*), are common in the wet marshes during the winter season. The eastern common crane (*grus grus lilfordi*) and the demoiselle crane (*anthropoides virgo*), or karkara, are scarcely seen. The lesser florican (*eupodotis indica*), is a regular monsoon visitor in the grasslands. It is a small bustard not larger than a domestic fowl. The common grey partridge (*francolinus pondicerianus*) and painted partridge (*francolinus pictus*) are common though not plentiful, being found everywhere. The rock bus qual (*perdicula argoondah*) lavari, jungle bush qual (*perdicula asiatica*) ; and the button quails (*turnicidae*), are distributed over all parts of the district. The common or grey quail (*coturnix coturnix coturnix*), is a winter migrant, coming in October and leaving in March. The black-brested or rain quail (*conturnix cormandelia*) is resident. The pea-fowl, (*pavo cristatus*), or mor, is found throughout the country-side and in the forests, and is sometimes seen, frequenting villages where it has becomes almost domesticated. In contrast to this, the grey jungle-fowl (*gallus sonnerati*), *jungli murgho*, and red spurafwal (*galloperdix spadicea*) are uncommon and wild, being found only in the eastern Mandvi and Vajpur ranges, Bansda and Dharampur forest areas. They are not at all common and are very much persecuted. The common sandgrouse (*pterocles exustus erlangeri*) and painted sand-grouse (*pterocles indicus*), are both found and common, the latter only in forested or hilly areas. It is a very handsome bird and is known as rock grouse by sportsmen. The green pigeon (*treron phoenicoptera chlorigaster*), or harial, occurs in the forest areas and is a local migrant, flying long distances in search of its favourite food, the fruits of the ficus trees. The small game is not common except that which comes during the cold weather.

Of other birds, the following are seen on the water-sides :—

Bronze-winged jacana (*metopidius indicus*) ; pheasant-tailed jacana (*hydrophasianus chirvgus*), water cock (*Gallicrex cinerea*), sarus crane (*grus antigone antigone*), openbill stork (*anastomus oscitans*), egrets of many types, painted (*ibis leucocephalus leucocephalus*), and black-necked (*xenorhynchus*

asiaticus asiaticus) storks, red-wattled lapwing (*hoplorterus inditus indicus*), and a great variety of migratory waders. Of the forest-birds, the common grey hornbill (*tockus birostris*) or *chilotro*, is noteworthy. It is sometimes killed for its medicinal qualities at the time of maternity. This is a large grey bird, and is of the size of a kite. It has a thick bill on which there is a casque. The long tail is tipped with black and white. A remarkable fact about this bird is that during the breeding season the female is incarcerated in the nest-hole in which she lays her eggs. The male plasters the cavity so as to leave only the bill of his wife visible during the incubation period. He then feeds his spouse until the eggs are hatched at which time she has undergone a moult and is ready to be released from her cell. The male breaks open the entrance for her exit and then both the parents thereafter replaster the entrance and feed the young until they are ready to leave the nest. The species is not uncommon in the forests and the country-side where there are large trees. The large Indian parakeet (psittacula cupatria), is another bird of the forest which is popular amongst the poor who catch the young and train them to whistle and talk. Many other beautiful birds are seen in the forest areas The crow pheasant (centropus sinensis). known as *kakan-kumbho*. is a black *koel-like* bird with chestnut wings andis found everywhere and is a well-known bird to the rural people.

FISH AND FISHERIES

Introduction.

Fisheries of the Surat district are potentially rich and provide ample scope for their development The district has a coastline of about 80 miles dotted with several fishing ports which have come into existence as a result of indentations caused by a number of small rivers debouching into the sea in this area. The Western Railway passes across the length of the district, making transport of fish products rather facile, but means of communication between the fishery ports and the railway line leaves much to be desired.

Fish and fisheries of Surat district are divided into three broad categories viz.. marine, estuarine and fresh water fisheries.

Marine fisheries of the district cover the entire coastal region of the Arabian Sea from the Kim in the north to the Damanganga in the south. The estuarine fisheries are spread over the tidal portions of the Damanganga. Kolak. Par. Vanki. Auranga. Ambika. Kaveri. Khandera. Purna. Mindhola and Tapi, where the admixture of fresh and salt water of the sea creates favourable conditions for estuarine fisheries. Most of the rivers are small and their estuarine areas are also limited in extent. Fresh water fisheries are confined to such portions of these rivers as lie within the district, but the extent of these fisheries also is extremely small as the flow of fresh water in these rivers, except the Tapi, is almost non-existent after the winter. The Tapi is a perennial river, but the flow

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of water even in this river is reduced to a minor stream at Kakrapar where a new irrigation weir was constructed in 1953. There are very few perennial tanks where fish culture on a commercial scale is possible.

The important fishing villages engaged in the capture of marine fish are as under :—

Kolak, Umarsadi, Magod-Dungri, Adhar Dipla, Moti Danti, Bhat, Kankra Kaniyat, Movasa, Vansi-Borsi, Danti and Onjal.

The commercially important marine fish fauna of the district comprise the following varieties of fish :—

sub-order : selachoidei.

family : carchariidae (sharks).

scoliodon sorrakowah (Cuv.)....and *carcharias laticaudus* (*Kner*) : Both the species of these sharks are locally known as '*moosii*' and are caught all along the coast. They do not grow to large size.

carcharies melanopterus day galeocerdo tigrunus : These are locally known as '*magra*' or '*patari*' and are occasionally caught on hooks and lines. They grow to large sizes and their livers are used for extraction of oil which is rich in vitamin A.

sphyrna zygaena (linn.)....(*zygaena malleus*) *day* : This is known as hammerhead shark and is sometimes entangled in fishermen's nets. Livers of these creatures are rich in vitamin A potency.

sub-order : batoidei.

family : pristidae.

pristis cuspidatus latham : The shark is styled as saw fish on account of a formidable saw-like prologation of its snout. It is armed with sharp pointed teeth on either side. The fish is locally known as '*vehar*. This is also found accidentally entangled in the fishermen's nets while following excitedly schools of fish on which it feeds.

rhynchobatus djiddensis (Fork) : is also locally known as '*magra*' in this district. The liver of the fish is used for extraction of shark liver oil .

family : trygonidae

dasyatis (himantura) *uarnak* (forsk) : This sting ray was previously known as *Trygone uarnak* and in the local language

it is called as '*Warkhol*'. The flesh is used as food by poor class of people.

order : apodes.

family : muraenidae.

Muraenesox talabonoides (blkr.) which is locally called as '*wam*', is the common marine eel caught round about Bulsar. In the seashore villages the eels are not as popular as they are in other countries, but in the interior places they serve as onutritious food. Actually, they are very good eating and " the odour of cooking eels is said to make a dead man sniff" (Moses). However, their snake-like bodies make them less popular.

family : siluridae.

tachysurus sona (c.v.)..(=*arius sona* day).

tachysurus jella (=arius jella day).

plotosus sp.

The first species is locally called as '*khaga*'. the second one as '*dharva*' and the third as '*singali*'. However, all these cat fishes are commonly known as '*singala*' in general. They are found in good numbers all over the coast. They are extensively salted and dried. The males of the genus tachysurus are known to carry eggs in a pouch in the throat and protect them until the young ones are able to take care of themselves. These fishes grow to the length of about two feet. Their bladders after drying are exported to Bombay, for further despatch to China and Far Eastern countries where there is great demand for the same.

family : clupeidae.

coilia dussumieri (c.v.) locally called '*mandeli*'.

thrissocles mystax (schn.) locally called '*Kati*'.

thrissocles malabaricus (Bl.)..day :

engraulis malabaricus also locally called '*kati*'.

stolephorus malabaricus (Day) locally called '*phansti*'.

ilisha elongata (Benn.)..(=*pellona elongata* day) all so locally called '*phansti*'.

Hilsha ilisha (ham.)..(=*clupea ilisha* day) locally called *chaksi*.

Hilsa toli (c.v.)..(=*clupea toli* day) locally called 'bhing' or '*monday*'.

Out of the above-mentioned fishes, '*mandeli*' is very common the waters off Kolak, Umarsadi and Bulsar. and is chiefly ried in the sun. Both the types of '*phansti*' are not, however, so common occurrence ; "*Chaksi* is also rare in this district.

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However *'modad'* is abundantly caught in the monsoon at Bilimora, Navsari and other adjoining places near the mouths of rivers Ambika and Purna. This fish is stowed in ice and exported in large quantities to Bombay. The average total length of this fish is about two feet.

family : scopelidae.

Harpodon nehereus (Day) locally known as *'bumla'*.

'Bumla' or the common Bombay duck is the only fish which is caught on a very large scale in this district. It occurs in the sea and the estuaries. It is consumed in fresh as well as dried form. This fish is credited to be the chief source of livelihood of fishermen of this district. This fish which varies in length from about 6 to 14 inches, is chiefly dried in the sun. When dry they are arranged and tied up into round bundles and sent to Bombay for onward transport.

family : scombresocidae.

Hemirhamphus sp. It is locally known as *'kagda'* and is caught in small quantities at Kolak, Umarsadi and Bulsar. The largest fish is about one foot in length.

family : polynemidae.

Polynemus indicus (Shaw). It is locally called *'dara'* or *'Dadha'*. It is caught in large quantities in this district. The largest size of this fish measures about five feet in length and weighs about 25 lbs. At Kolak it is caught during the months of March to May. At Umarsadi it is caught from October to December. At Medhor-Bhat, Bavri, Methia, Kakwadi, Kanyat, Chijgam, Rana Bhata and Movasa, it is caught during the months of February to September each year.

Eleutheronema tetradactylum Shaw (=*Polynemus tetradactylus* Day) is called *'Rawas'* or *'Ramus'* in the local language. It is only during monsoon that this fish is caught in small quantities on the southern side of this district and is considered a delicacy among the fish-eating population.

Family : Sciaenidae.

Pseudosciaena diacanthus (Lac).. (= *Sciaena diacanthus* Day).

Pseudosciana sina (C.V.).. (=*Sciaena sina Day*) and *Sciaena vogleri*.

Pseudosciaena soldado (Lac)..(=*Sciaena miles Day*).

All these three species are known as *'Ghol'*. The *'Ghol'*, which attain a size of about four feet, are caught at Kolak from

March to May, at Umarsadi, from October to December and at Medhor-Bhat and round about places from February to September. They are eaten both fresh and salted.

Otolithus ruber (Bl. Sch.) : is locally called '*Dhangri*'. It occurs in considerable quantities in the sea and also in the estuares of the district. Near Bhat and Onjal it is caught from February to September. In the estuarine portion of the Kolak river it is caught throughout the year. At Umarsadi it is caught from October to December. The fish is usually dried either for human consumption or for manure, depending on the freshness of the material.

Otolithoides brunneus (Day)..(=*Sciaenoides* brunneus Day) locally called 'Koth' grows to about five feet in length and is caught practically all along the coast. Near Kolak it is captured during the months of March to May and at other places during the same months when 'Dhangri' is caught.

Family : *Trichiuridae*.

Trichiurus savala Cuv.

Trichiurus haumela (Forsk).

Both these types of silver and gray ribbon fishes are called locally '*Pata*'. The largest '*Pata*' caught is about a little more than two feet in length. At Umarsadi they occur between October to December. They are usually dried in the sun.

Family : Stromateidae.

Pampus argenteus (Euphr.)..(=*Stromateus cinereus* (Euphr).

Pampus chinesis (Euphr)..(=*Stromateus sinensis* (Cantor).

Parastromateus niger (Bl.)..(=*Stromateus niger*. Bl.).

The first two of these fishes are known as white pomfret and the third as black pomfret. They are locally called '*Vichuda*' as well as '*Chhamna*'. At Kolak they are caught during November to January and in Bulsar and round about places during February to September.

Family : Gobiidae.

Periophthalmodon schlosseri (Pall.)..(=*Periophthalmus schlosseri*).

Boleopththalmus dussumieri (C.V.)

Boleophthalmus boddaerti (Pall.)

These are the common mud skippers which are known in Gujarati as '*Levta*'. They are found all round the year in all

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the estuaries of the district. They cannot, however, be caught and exported in large quantities and are usually consumed only by the local people.

Family : Mugilidae.

Mugil speigleri Blkr. and *Mugil cephalus* locally known as '*Boi*' are caught in abundance practically all over the district. At Bulsar, Bhadeli Jagalala, Danti and Dandi, '*Boi*' is caught in the sea and in the estuary of the river Auranga from September to April. At Bilimora, Vaghrej, Gandevi, Sonwadi and Dholai, it is caught in the estuary of the Ambika river throughout the year. At Medhor, it is caught in the sea as well as in the estuary from June to September. At Kanera and Bhata, it is caught again throughout the year.

Family : Pleuronectidae.

Pseudorhombhus arsius (H.B.)

Cynoglossus lingua (H.B.)

These fishes locally called '*Jipti*' are rarely caught and marketed on a commercial scale.

The following prawns are caught in the district.

Penaeus indicus (E. Edw.)

Penaeus semisulcatus (de Man).

Leander styliferus (M.Edw.)

Leander potamiscus (Kamp).

All the varieties of prawns except the last one are called '*Zinga*'. When the exoskeleton is removed they are called '*Chhola*'. The last variety is called '*Sondhia*'. They vary in length from two to seven inches and are caught practically all round the year in the sea and the estuaries.

The *crab Scylla serrata* (Fork.) is also caught all the year round but the catch is insignificant.

At the time of low tide when the proportion of salt water in the rivers Vanki and Auranga is very small the following fishes have been observed in them. However, a complete survey of these waters has not been undertaken as fresh water fish are very rarely sold in the markets of the district.

Labeo rohita called *Roi* or '*Rou*' locally.

Labeo calbasu called '*Nagari*'.

Aplocheilus lineatus
Barbus sarana.

Fishing season.

Fishing in the sea is not practised throughout the year but it is restricted only to the fair season commencing from October and ending in May. This period is further divided into two seasons. The first is from October to January and the second from February to May.

At the commencement of the season in October, the fishermen of the district go out to sea and catch Bombay duck, prawns, and other smaller fish. The nets employed in the fishing operations are bag nets which are locally known as '*Dol*' or '*Bokshi*' nets. Some fishermen from Kolak, Umarsadi and Dungri, Danti and Onzal, temporarily migrate to Jamnagar, Jafrabad etc., and catch pomfrets, which are transported in ice to Bombay by either power or sail boats.

The second season starts in February and ends in May. In this season the fishermen use drift nets for the capture of large fish like *ghol* (*Pseudosciaena diacanthus*), *dadha* (*Polynemus indicus*), Rawas (*P. tetradactylus*), Modar (*H. Toli*), and Koth (*Otolithoides sp.*).

Bombay duck, prawns and other small forms are preserved by drying in the sun ; common salt is used for curing large-sized fishes. In addition to the cured fish which is available from most of the villages, fishermen from Bilimora and Navsari dispatch large quantities of fresh fish such as *ghol*, *dadha*, and *bhing* to Bombay, stored in ice.

Estuarine fisheries are exploited largely by fishermen from Navsari and Bilimora who specialise in this kind of fishing. On a small scale estuarine fishing is practised throughout the year, but large hauls, specially of *bhing* and *palla*, are made during the monsoon. This fish is exported to Bombay duly preserved in ice. *ravas*, *ghol*, and *modad* also form a small portion of the catch in monsoon.

The fresh water fisheries of the district are spread over short lengths of all rivers mentioned above. The two main rivers which provide estuarine fisheries within the limits of the district are Ambika and Purna. The fishing villages along the river Ambika are :—

Danti, Medhor, Dholai, Kalamtha, Bilimora, Bigri and Undach.

The fishing villages along the river Purna are :—

Samapore, Matwad, Karadi, Jalalpore and Navsari.

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In the rivers, fish are caught in drift nets operated from small flat bottom *machhwas* which are called as "*nana machhwas*". There are two fishermen in each "*nana machhwa*," one of them operates the net and the other manoeuvres the boat. The nets are allowed to drift in the river and the fish are enmeshed or gilled into the meshes.

Fishing nets.

Fishing nets : The types of fishing nets used in the district are as under :—

1. *Choklu* or *Palwa jal* (drift net).
2. *Gholu* or *Boksi jal* (bag or stake net).
3. *Vedhi*, *Endi* or *Sonki* (drag net).
4. *Faroda* (shore gill net).
5. *Chhogia* (cast net).
6. *Jhachichi Mandana* (staked wall net).
7. *Jujwari* (half stake woall net).
8. *Mhagh* (barrier net).
9. *Jamda* net (hand net).
10. *Gari* (hooks and lines).

1. *Choklu :* Choklu or the *Palwa jal* is a kind of long drift net generally made of twisted hemp. The mesh of the net depends on the kind of fish to be caught. For *Hilsa* or *Palla* fish the mesh used is generally 4½" to 5" extended mesh. The net has a number of floats on its upper margin or cork line and is weighted at its botton line. By this arrangement the net floats or drifts in water like a thin curtain. Fish moving in water or travelling with current get enmeshed or caught by their gill covers. This is a common method used for *chaski* (*Hilsa ilisha*), *modar* (*H. toli*), *ravas*, *ghol* etc.

A number of these nets are jointed into a single unit for operation. They are generally operated from boats. The number of men required to operate the net depends on its length. The length of nets used for operation in rivers ranges between 600 to 700 feet. For operation in the sea, much longer nets are used.

2 *Gholu* is a kind of funnel-shaped bag net which is mixed either on two stake or on two buoys. The stakes are huge poles or pylons planted at the bottom of the sea. They are 80 to 120 ft. long and comprise four pieces joined together. The lower most piece is the thickest and tapered at the lower end. The other pieces are progressively narrower in girth. The net is 200-300 ft. in circumference at the mouth of the funnel and is 120 to 180 ft. in length. A large size '*golva*' is known as '*dol*' net around Bombay and it works on the same principle as that of the '*dol*'.*

*The details of a 'Dol' and the method of fixing the huge stakes at the bottom of the sea are detailed in an article by Dr. S. B. Setna entitled "Bombay Fishermen's Ingenuity" Journ. Bom. Nat. Hist. Soc. Vol. 48 Ho. 3, 1949.

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3. *Vedhi*, *Endi* or *Eeri* is a kind of a shore seine or a drag net operated near the shore. It is a long rectangular net which is paid out in a semicircular manner and pulled at both ends from the shore. Fish encompassed within the sector of the net is pulled ashore. It requires six or eight men. The net has floats on the upper edge and a few sinkers on the lower edge. A smaller form of *Vedhi* or *Endi* is known as "Sokni" which is operated by two men. It is about 20' long and 6' broad. It has two poles attached on either side of it, which are used for dragging the net by the operating men. This is a very common and handy method for catching small fish along the shore.

4. *Faroda* is a kind of gill-net about 100' long and 4' deep. It has floats on top and sinkers at the bottom so that when paid out it hangs like a wall. It is paid out in small coves or inlets of riverine areas or the shore and the fish are frightened by noise caused by beating sticks, oars etc., on the water. Fish so frightened get enmeshed in the net while trying to escape.

5. '*Chhogia*' is an ordinary cast net which appears conical in shape but when spread out becomes a complete circle. It has a string at the apex of the cone which, when the net is spread, assumes a central position. The peripheral margin of the net to which the lead weights are attached, is tucked in so as to form a pouch all round the circumference. For operation, the net is folded and arranged on the left hand by a fisherman, and, when it is cast, it spreads on the water in a circular manner. It sinks to the bottom in a spread out condition on account of the lead weights and thus captures the fish within the circular area. While sinking, the net becomes conical. When the string of the net at its apex is pulled, it gathers the net at one place and thus collects the fish caught within the circumference into the marginal pouches.

6. *Jamda* net is a small purse-like net generally used by Bhil fishermen.*

7. *Janchichi Mandana*: In this method a long gill net is fixed like an erect wall across a portion of a river with the help of a number of small stakes or poles. The stakes are temporarily fixed in the bed of a river and the net is attached to them to make a wall. When fish swim up and down with the current they get enmeshed in this net. If the net is fixed in the tidal zone fish can be caught both at the high tide and low tide. In another type of net known as *jujawari*, the stakes are only at two ends of the net, the middle portion of the net being provided with ropes at upper and lower margins.

*For detailed description see "Hilsa Fisheries of the Narbada River" by C. V. Kulkarni—Journ. Bom. Nat. Hist. Soc. Vol. 51, 1951.

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Fishing Nets

8. *Mhagh :* This method of fishing is followed in tidal areas, where there are deep indentations of the coast, which are left exposed during ebb tides. At such places a long small meshed net is arranged in a line from one coastal protrusion to another and kept down folded during ebb tide. During high tide fish enter the area without any hindrance. At this time the net is lifted and fixed there like a wall of nets with the help of small stakes so that when the tide recedes the fish cannot escape and are thus caught in large numbers.

Fishing boats : Three types of fishing boats are used in this district. The first type has a tonnage varying from 100 to 125 khandies. In a boat of this type, there are eight fishermen, seven of whom operate the nets and the rest manoeuvre the boat which is ealled "*Vahan*" in Gujarati. The second type which is called "*Machhwa*" varies in tonnage from 6 to 15 *khandis*. Each *machhwa* is manned by four persons, three of whom operate the nets and the fourth manoeuvres the boat. The third type which has been referred to earlier as "*nana machhwa*" has a carrying capacity varying up to five *khandis*. There are in all about 500 fishing boats in the district.

Fisheries co-operatives : There are 12 co-operative societies of fishermen in the district. Government advanced loans to these societies for development of fisheries. Engines for mechanisation of indigenous craft are alloted to societies as well as groups of fishermen at 50% subsidy and 50% loan.

Ice factories : Two ice factories, namely Amrit Ice and Cold Storage, Surat, and Bilimora Ice and Cold Storage, Bilimora, established by private parties, operate mainly for the benefit of fishermen in the district. The former is capable of producing 50 tons of ice per day and has a storage capacity of about 300 tons. The latter has 10 ton ice plant and 25 ton cold storage for fish and ice.

SNAKES.

This district lying partly towards the western coast of Gujarat State is interspersed by a number of rivers like Kim, Tapi, Purna, Ambika, Auranga, Par and Damanganga and the country on the north and south-east is hilly. Both these factors make the terrian green and fertile. Therefore, there are several kinds of snakes inhabiting this area.

The following are figures of recorded cases of death due to snake-bite :—

Number of deaths due to snake-bites.

Year		Rural Circle	Town Circle	Total
1948	...	21	1	22
1949	...	26	3	29
1950	...	31	0	31
1951	...	63	2	65
1952	...	59	5	64
1953	...	53	3	56

The snakes found are both non-poisonous and poisonous. The non-poisonous are :—

FAM : TYPHLOPIDAE. Blind snakes, belonging to this family may be found in the hilly regions of the district particularly the south-east area. These are burrowing snakes feeding on decaying matter and insects, and growing to about 12 to 14 inches in length.

FAM : BOIDAE. (i) *Python molurus* is found throughout the district. At the bases of the hills and the rocky places near river banks one could meet this huge snake which may weight as much as 250 pounds and grow to more than 18 feet in length. It kills its prey by construction and the food consists mainly of birds and mammals. Normally the snake is brown with pinkish spots.

(ii) *Eryx conicus :* This sand snake is very lethargic and often mistaken to be an young one of a python. It can easily be distinguished from the latter, firstly by the bluntness of its tail end, and secondly by the nature of dorsal brown, black-edged spotes running in zig-zag fashion.

FAM : COBUBRIDAE.—

(i) *Ptyas mucosus :* This swift-moving snake is found all over the district. It is often mistaken to be a cobra. It is brown with irregular, but strongly marked cross-bars on the posterior half of the body forming a reticulate pattern. It grows to a maximum length of about 10 feet and when cornered, may emit a sound like a kite, as well as strike viciously. This snake is an important enemy of rats, as such very valuable to farmers in the rural areas.

(*ii*) *Oligodon species :* There are a couple of species of this snake met with in the locality. These snakes are brown with narrow black transverse cross-bars. Often met with in the gardens, these small snakes are mistaken for kraits.

(*iii*) *Lycodon species :* These snakes are particularly nocturnal, and have a fondness for entering human habitations. Growing to a length of about a foot or so, these dark brown snakes with white cross-bars are also taken to be kraits. They are harmless but when cornered strike very readily.

(*iv*) *Natrix Piscator :* This olive-coloured snake with dorsal black spots breeds very prolifically and is seen near water reservoirs, particularly more in the rainy season. It is easily tamed, readily feeds upon frogs and almost always forms a part of the bags of snake charmers.

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SNAKES

(v) *Dryophis nasutus:* This verdant green snake with a long snout and a whip-like tail is met with in the green southern areas perched on trees and bushes. The head is held motionless like a green twig, but the quivering tongue and the shining eyes betray this snake. The poison of this snake is not harmful to man and one could always handle this snake without much danger.

The poisonous varieties are :—

Poisonous snakes

FAM : ELAPIDAE:

(i) *Naja naja*—Both the binocoellate and the monocoellate cobras are found in this locality. In the black cotton soil the black variety is also present. All these varieties have the hood typical of the cobra. Many deaths are claimed due to the bite of this snakes. The poison is neurotoxic and the only sure remedy is a proper anti-venine injection which must be given in sufficient time.

(ii) *Bungarus Caeruleus*—This black snake with double white cross-bars and a series of hexagonal dorsal scales is very poisonous but is not common all over the district. It grows to about four feet, does not normally attack, but when badly disturbed it strikes and its poisor is also neurotoxic.

FAM : VIPERIDAE :

(i) *Vipera russelli*—Russell's viper is very common in the northern regions of the district. This snake is brown with three rows of about 24 black spots on the dorsal surface. When disturbed it curls, hisses loudly and continuously and literally hurls viciously on the object. The poison is vaso-toxic. It grows to about five feet, and prefers to live in bushes and under stones. The bite causes great burning pain and sloughing, apart from other general symptoms.

(ii) *Echis Carinatus* :

This small brown snake is found in the south. It is about one foot and is very vicious, attacking without provocation. When disturbed it coils into a figure of 8 and taking the lever of the body, hurls the head up to 10 inches high from the ground. It makes a hissing sound which is caused by the rubbing of the saw-lime dorsal scales.

APPENDIX 1

CHAPTER 1.
Physical Features.
NAVIGATION OF TAPI

At present (1876) navigation of the Tapi is confined to the last twenty miles of its course. Before the days of railway it was at one time thought that the Tapi might be made the highway for the carriage of the produce of Khandesh and the Central Provinces (Now Madhya Pradesh) to the sea. With this object, in 1852 a survey of the Tapi was made. This survey extended over a distance of 232 miles from the city of Surat to near the east of Khandesh at the junction of the Waghur and Tapi rivers. Beyond the eastern limit of Khandesh, during the first 150 miles of its course, the bed of the Tapi is too rough to permit of its navigation by boats. The only use which its waters serve for purposes of trade is the floating down of timber in times of flood, and even then the channel is so broken that the wood is said frequently to be sucked into secret currents and lost. The 232 miles of the Tapi's course, surveyed by Mr. Edwards in 1852, have been divided by him into eleven sections : five open stretches, varying in length from eleven to fifty-eight miles; five rocky barriers of, on an average, about two miles in length; and a special section, fifty-one miles long, on the whole rocky and hard to navigate, through which the stream forces its way from the plain of Khandesh to the low-lying lands of Gujarat.

Survey, 1852.

Of each of the eleven sections Mr. Edwards has supplied the following details. Beginning with the portion of the river furthest from the sea, the first section, forty-nine miles long, extends from the junction of the Waghur river on the left bank of the Tapi about thirty-three miles below Barhanpur, westwards to the junction of the Bori. This part of the river presented no greater hinderance to navigation than twenty-seven gravel shoals and one light rocky ledge. At the junction of the Bori the second section begins, consisting of a barrier of rocks extending across the bed of the Tapi for a distance of one mile and 795 feet. But this barrier was not formidable, and, it was estimated, might be removed at a cost of not more than £150 (Rs. 1,500). Below these rocks the third division stretches westwards for fifty-eight miles and 1,575 feet, as far as the village of Prakasha, in the Shahada sub-division. This section was found to contain thirty-six gravel shoals and nine ledges of rock, but none of them large enough to prevent the passage of boats. At Prakasha rocks again blocked up the channel, forming a barrier extending over a distance of one mile and 3,020 feet, in character much like that formerly found at the junction of the Bori river. Through this barrier it was estimated that a passage could be cleared at a cost of £250 (Rs. 2,500). This rough section is again followed by an open reach extending over a distance of twenty miles and 2,143 feet, with fewer shoals than the former stretch, and a slight increase in the number of obstructions from rocks. The river has now reached the wild country at the west of Khandesh, and it is here that the first serious obstruction to navigation is met. This passage, beginning with a rapid

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falling 8.5 feet in a total length of 605 feet extend over a distance of one mile and 5,120 feet, the stream shooting over four successive ridges of rock. Further on, the stream, among rocks and boulders, dashing over seven smaller barriers of rock, enters a rough passage with a fall of 18.69 feet in a length of 725 feet, called, from the narrowness of the channel and the wildness of its bank, the *Haranfal*, or Deer's Leap. To clear a channel fit for the passage of boats through these rocks would, it was estimated, cost a sum of £ 1,740 (Rs. 17,300). The seventh division extends through the wild country between the west of Khandesh and the east of Surat, a distance of fifty-one miles and 3,423 feet. The obstructions in this part of the river's course include altogether 3,120 feet of rocky ledges and twenty-one gravel shoals. After shooting the Haranfal rapids the river enters a deep basin, passing between high cliffs for about 2,500 feet, through a channel eighty feet wide and of considerable depth. Beyond this basin the cliffs cease, the channel of the river again becomes open, and, except for some rocks on the left side, the bed is of gravel. Below the village of Kokti there is plenty of water, and but few hinderances to navigation. At Koida, for about a mile and a half, the bed of the river is rocky. For a portion of this distance there are two channels; but the only obstacles are a few ridges of rock, some loose boulders, and at one spot for about thirty feet the narrowness of the channel. Beyond these rocks, except for two slight ridges, the one below the deserted village of Kurupora, and the other at Kapur, the stream again winds over a gravel bed past the fort of Bajrudh to Karanja. In the rocks opposite Kapur is some coarse grained freestone, the only rocks of this kind found throughout the whole of the surveyed portions of the river. The channel of the river, which is now within the limits of the Mandvi sub-division of the Surat district, again passes through a barrier of rock, extending over a distance of 1 mile and 2,495 feet. Here the stream flows for some distance in one channel. It then divides into two, one on the right Bank and the other on the left, and they again unite opposite the village of Wareth. The better channel on the left bank might, it was estimated, be made fit for navigation at a cost of £200 (Rs. 2,000). The next or ninth division stretches for eleven miles and forty-five feet as far as the village of Karod, about fifty-six miles from the mouth of the river. Except for a few rocky ledges and one gravel shoal, the channel of the river throughout this section is clear, the whole forming wide and deep pools. Beyond Karod, near the villages of Haripara and Waghecha, the stream encounters its last barrier in the most westerly spur of the Rajpipla hills. Here, for nearly four miles, the waters of the river, with an average fall of six feet a mile, force their way among masses of rock and isolated boulders that rise but a few feet above the surface of the stream. The confusion of rocks seemed too great to admit of the passage of a boat. But a close examination showed several good channels winding through the boulders. To make these rapids easily passable, the channel should

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SURVEY 1852

be defined, straightened in some places, and all other outlets for the water blocked up. These changes, it was estimated, might be made at a cost of £700 (Rs. 7,000) below this barrier of rocks to near Surat, a distance of more than thirty-one miles, the channel is, on the whole, open, the obstructions consisting of six gravel shoals and rocky ledges, amounting altogether to a breadth of seventy feet. For a short distance beyond Khanjroli, rocks continue to appear in the bed of the river till, at the village of Piparia, one portion of the water runs in a stream to the left bank, while another flows near the middle of the river. Nearly opposite Piparia the left stream again divides in two, one portion running between the left bank and a lofty island, thickly covered with acacia, or *bawal* trees, and the other uniting with the main stream. After passing the island as far as Patna, the water is again collected in an extensive pool, with a few rocks here and there. Below this point, to the limits of the ordinary navigation, there are few obstructions, the river forming long and deep pools over beds of gravel. In spite of the difficulties mentioned above, Mr. Edwards was able at the driest season of the year — the months of April and May — to bring down the whole way, without once taking it out of the water, a boat fifteen feet long, four feet four inches wide, and drawing, when empty, one foot of water. He estimated that at a total cost of £5,355 (Rs. 53,550) all the obstructions might be removed, and the stream opened for trade over a distance of 232 miles. The average annual expenditure on establishment and in keeping the channel of the river clear he calculated at £650 (Rs. 6,500). With regard to the prospects of developing a river traffic, Mr. Edwards was of opinion that the whole produce of Khandesh and a portion of the exports from Berar and Central India would find their way by the Tapi to Surat. The vessels best suited for this trade were, in his opinion, boats ninty-six feet long, eight feet wide, and two feet deep, able to carry loads of about thirteen tons. Such boats, he calculated, could be made of wood at a cost of £50 (Rs. 500) each, and with the help of the current on the way down, and the strong westerly winds on the return voyage, could complete, on an average, eight trips in the year. No attempt would seem to have been made to carry out Mr. Edwards' scheme, and a few years afterwards, with the construction of the railway from Bombay through Khandesh and Berar, the necessity of providing water-carriage for the produce of those countries ceased. To remove the sand-banks from the mouth of the river, and from a harbour at or near the town of Surat, was one of the original schemes framed by the projectors of the Bombay, Baroda, and Central India Railway. No steps were, however, taken to carry out this part of the original plan, and, with the exception of an unsuccessful attempt to use the force of the current to work a dredging-machine, no effort would seem to have been made to improve the navigation of the Tapi.

Navigation of the river. 1876.

The following details show the present (1876) state of the channel of the Tapi between the sea and the city of Surat:

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The anchorage ground for large ships in Surat road, at the mouth of the Tapi, is in forty-two to forty-eight feet at low water. Though the Surat roads are a safe place of anchorage from October to the beginning of April, it is considered dangerous for ships drawing much water to remain in the road after the middle of April. For in this month and early in May smart southerly winds frequently blow during the springs, particularly in the night with the flood-tide, At the road the tides run rapidly, especially the ebb, about 5¾ miles (five knots) an hour; further in, near the bar, they do not run with so much velocity. At the bar the height of the tide varies from twelve to twenty-two feet at neaps, to twenty-seven feet at the highest springs. The average rise is here about fifteen feet; but further up the river, about four miles west of Surat, the rise of the tide is not more than ten feet. The entrance over the bar into the Surat river is continually changing. By the shifting of the sand new channels are opened and old ones shut up. Formerly the Dumas channel was the deepest, and was generally used by ships. The direction of this passage was along the east side of a sand-bank towards the village of Dumas on the left bank of the river. This channel is now filled, and is only navigable at half tide. The proper entrance can be pointed out only by a native pilot. Although the estuary of the river is here not less than four miles across, the passage is narrow, and at low-water spring-tides, between the dry sands near the bar, there is not depth sufficient for a small boat. To those passing outward these banks of dry sand have a dreary aspect, rising from twelve to fourteen feet on either side of the narrow channel. During the latter part of the ebb the water, rushing violently through the narrow channels, carries boats with it of great spead. These passages are very shallow, and boats, always liable to touch the bottom, would upset if the sailors were not ready to leap out and support them. The distance from the bar to the city of Surat is about twelve, and by the winding of the channel about fifteen, miles. For nearly two-thirds of this distance there is a continued chain of sand-banks, many of them dry at half tide, with very small depths at low water in the channels between them. The two chief sand-banks are near Magdala, about four miles, and Umra, about ten miles, from the mouth of the river. Above Umra and near the city the river is more contracted, with deeper water. Opposite the fort of Surat there is at all times of the tide a depth of water of not less than ten feet. Though boats sometimes pass up to Rander, three miles, and on to the railway bridge at Amroli, eleven miles above Surat, that city is at present the ordinary limit of navigation. The shipping which now (1876) visit Surat are native craft of from eighteen to thirty-six tons (50 to 100 *khandis*) burden, and one light draft steamer that plies from Surat to Ghogo and Bhavnagar on the western shore of the Gulf of Cambay. These boats, steam-ships, and sailing vessels alike ply only during the fair-weather season. In the months of June, July and August there is nothing but purely

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local traffic on the Tapi, and very little else in the month of September. Unless when fortunate in tide and wind, sailing vessels of any size often take from two to three days to pass as far up as Surat. The steam-ships, varying from 100 to 200 tons burden, and drawing from five to six feet, cannot pass up and down the river at less than half tides.

Though at present so many obstacles exist in the way of navigation, a comparison of the descriptions of the river given in former years would seem to show that the character of its bed has changed but little since the days when Surat was one of the chief centres of commerce in Western India. In 1863 the "Pioneer" steam-ship, 400 tons burden, attempted, when lying off Magdala, four miles from the mouth of the river, to take in a cargo of cotton. When about half loaded she took the ground and became a wreck. The engineer who examined the river in 1854, came to the conclusion that the bed had filled in considerably, and that the action of the current was not of sufficient power to scour out the channel. In 1855 ships of from 144 to 180 tons burden (400-500 *khandis*) passed up as far as Surat. At that time there was over the bar at all times of the tide a depth of fifteen feet of water. Between the mouth of the river and Surat were several shoals and sand-banks that could be passed only at high tides. At neaps, even when the tide was full, on the banks at Umra and Magdala, there were not more than six and a half feet of water. In 1850 it was thought that with no very great outlay the passage might be made practicable as far as Surat during the greater part of the day. The Waracha cut, by draining off some of the current, was supposed to have increased the tendency of the river to silt. In 1846, at the mouth of the river, across a whole breadth of from five to seven miles, were only two channels occupying together not more than a mile or a mile and a half. Boats getting on the sand-banks were often lost. In the beginning of the present century (1813) the navigation of the Tapi is said to have been very difficult in consequence of "the sands frequently shifting, by which new channels are formed and old ones shut up. Nearly by two-thirds of the distance from the bar to Surat was a continued chain of banks, having but narrow channels between them".

A hundred years ago (November 1774), on the bar at the mouth of the river, the depth of water varied from three feet at low tide to eighteen feet at springs. Ships of considerable size could then pass over the bar ; but further up in the river were other banks, of which that near the village of Umra, half a league below Surat, was the shoalest. Above Surat the river was described as becoming shallower and shallower, so that at low water, as at present, it was fordable at the village of Wariav. Except when in want of repairs, ships engaged in the Eurpoean trade remained at anchor on the roads, the

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merchants taking their goods to Surat either by land or in small boat. Though Ovington (1688) states that the goods were brought up to Surat in "hoys, yachts, and country boats with great convenience and expedition," another traveller, a few years earlier (1666), had found that even in a small boat the passage up the river took from 10 A.M. to 8 P. M., and in 1638 Mandelslo found the river so shallow that it could "scarce carry a bark of seventy or eighty tons." Sir T. Herbert (1626) went from his ship at Suwali roads to Surat in a "chariot drawn by two buffaloes". This traveller speaks of the Tapi with some contempt, "as good neither for drink nor for navigation, serving for nothing save to mundify the idolatrous Banian." In 1609, though the channel was said to be fair, the river was able to bear vessels of only fifty tons. In 1530, when Antonio de Sylveira came against Surat, he found the mouth of the river so full of sand, that the larger ships of war did not attempt the passage, and the troops were sent up the river in small vessels. Even in the small boats the commander failed to reach Surat in one day. On the other hand, during the whole of this period, at certain seasons of the year, it was possible to bring large ships of 1,000 tons and upwards as far up the river as the city of Surat.

APPENDIX II

FLOODS.

Except over a limited portion of the Sahyadri hills, the tract of country drained by the Tapi is not subject to any great annual rain-fall. The break of the rains in the first week in June is generally marked by a considerable increase in the strength of the Tapi's stream, but a decided fresh is seldom seen till the first week of August. Floods bringing town water enough to fill the bed of the river up to the top of its banks are unusal, and even ordinary freshes last for but a short time. Occasionally, however, the floods are very severe, and, from the sharp bend in the course of the river at Fulpara, two miles east of the city of Surat, the waters, rising at times above the level of their left bank, force their way across the land, and, deluging the city, have on more than one occasion caused much loss of life and property. Some particulars have been collected of thirteen floods ranging over a term of about one hundred and fifty years. Of these three occured in the eighteenth century, in the years 1727, 1776, and 1782 ; and ten in the present century, in 1810, 1822, 1835, 1837 1843, 1849, 1872, 1873, and two in 1876.

In 1727, 1776 and 1782.

In August 1727 the water of the Tapi is said to have risen so high that boats, or *hodis*, sailed over the city wall near the castle as far as the Darbar, that is, behind the site of the present Kawasji Jehangir's Hospital. Again in July 1776 the water of the river is said to have risen ten feet in the space of a quarter of an hour, and to have increased so rapidly that in a short time it was almost on a level with the city wall. So strong was the flood that all the vessels anchored near the town were carried away from their moorings. The Dutch Company's schooner "Young Peter" was driven on shore at Athwa, two miles below Surat, and the pilgrim ship "Ganjawar" was carried down the river and dashed to pieces. Five years later, in 1782 (April 20th), there was a great storm, "one of the most dreadful ever remembered in Gujarat." According to Mr. Forbes, "many ships were driven ashore at the mouth of the Tapi, and the bank of the river was covered with their wrecks, which the violence of the wind and the swelling floods carried to a great distance inland. The island of Namra (or Bet, as it is now called), in the bed of the Tapi, raised well above the level of ordinary freshes, was submerged, causing the death of more than 2,000 persons, who, to escape the exactions of the Marathas, had sought a refuge upon it. At Surat the Tapi, overflowing its banks, entered the city, and did incalculable damage."

In 1810 and 1822.

Of the nineteenth century floods the first, in 1810, is spoken of as "another fearful visitation like that of 1782." The flood of 1822 would seem to have been a still more serious calamity. At the north-west corner of the city, near the upper limit of the river front, the city wall, from the Rafi tower down the bank as far as the Phatak gate, was carried away by the flood. West of the Fatak gate, above the castle, the water topped the walls,

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In 1810 and 1822

rising within two steps of the landing in front of the church, and below the castle, passing up the Mecca creek, it flooded the western suburbs to a depth of several feet. Besides this flow of water through the river front of the city, further up its course, at the Fulpara bend, the river, overtoping its left bank, rolled in a broad stream across two miles of country, and, setting against the east wall of the city between the Delhi and Sara gates, carried before it a large portion of the fortifications. This body of water, passing westwards through the city, joined the stream that had entered by the Mecca creek and rose to a depth of several feet along the line of the western wall. No particulars have been traced of the injuries to private property caused by this flood. With the exception of the damaged portion of the east wall, the breaches in the fortifications would seem to have been allowed to remain unrepaired.

In 1835.

On the 4th of August 1835 a severe storm passed over the district, the wind, accompanied by heavy rain, being strong enough to blow down large trees and unroof houses. Northwards at Broach, and southwards at Navsari, the flooding of the rivers is said to have caused much damage. At the mouth of the Tapi, when the flood-waters subsided, the beach at Dumas was strewn with trees, logs, and carcases of animals. In the city of Surat, about ten o'clock in the afternoon of the 6th, the the river began to overflow its banks and enter the town. About half past five on the following moring, the gale still continuing, the whole city was under water, and had the appearance of a sea. In Surat the height of the flood is said to have been one and half feet less than it was in 1822. On the other hand, probably owing to the severity of the gale, more damage than on the former occasion was done. At Surat alone upwards of 500 houses are said to have been carried away, and more than twenty people to have perished.

In 1837.

About two years after the storm of 1835, in August 1837, the country in the neighbourhood of the Tapi suffered from another flood. In the latter part of this month there were two distinct risings of the river. The first, begining on the 21st August, passed over in three days, without causing any considerable damage. The second, a much greater flood, began on the 29th August, and continued to swell till the evening of the 1st September, when it reached its greatest height. For the season of the year in the neighbourhood of Surat the weather was still, nor was there any unusually heavy local fall of rain. The cause of the flood would seem to have been some great deluge of water poured into the Tapi from the high lands between Khandesh and Surat. Near that part of its course the stream rose high enough to sweep away several villages with great destruction of life and property. The Kim and Narbada would seem to have been affected in the same way as the Tapi, for it is said that on reaching the plain country of Gujarat the three rivers joined, forming one continuous

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FLOODS IN 1837

stretch of water across a distance of more than forty miles. On its right bank, as it neared the coast, the Tapi is said to have overflowed the lands of the Olpad sub-division to a depth of five feet, covering the entire face of the country, except the raised village sites. The city of Surat, which had escaped uninjured by the rise of the river on the 21st August, was by this second flood almost entirely submerged. In some parts of the city the water stood atleast twenty feet deep, "completely covering the tops of the houses and obliterating even the lines of considerable market places and streets." As in 1822 the waters of the river, overflowing the low land on its left bank near the north-west corner of the outer walls, forced their way into the city between the Katargam and wariav gates, and flooded the north-eastern quarters of the town. Near the castle the Tapi rose above the level of the river front wall, and passing inwards covered the open ground to a depth of six feet three inches. Further west the waters, entering by the Mecca creek, poured southwards, flooding the whole of the western suburbs. Besides this overflow direct from the river on the north, a body of water, said to be two miles broad, leaving the regular channel of the Tapi at Fulpara, tore straight across towards the east wall of Surat, and carried away parts that had been repaired since the flood of 1822. On reaching the city this torrent would seem to have split into two streams. Of these, one passed southwards to the Bhimpor creek ; the other, pouring through the city, met the flood from the Mecca creek ; and the two streams flowing together westwards, burst through the city wall near the Majura gate, falling finally into the Tapi below Surat.

Much damage was done by this flood. The city walls were in several places broken down. In the north-east, between the wariav and Katargam gates, over a distance of 222 feet; further east, for twenty-one feet, between the Lal and Delhi gates; beyond that, where the great body of water rushed through from Fulpara, was a break 222 feet in length; and finally in the west, between the Majura and Athwa gates, where the waters escaped, was a breach in the wall 153 feet long. On the river front near the custom house, for more than 100 yards, the wall fell outwards into the stream. Further west, in front of the church, portions of the bank, carrying with them the clerk's house (formerly the parsonage) and the school, sank into the river. Beyond the castle and the mouth of the Mecca creek, the Dutch wharf, already injured by former floods and by the destruction of its fine masonry screen, lost an additional space of more than fifty feet. Besides this injury to the city walls there was much loss of private propery: 372 houses were entirely washed away, 1,012 fell, and 2,539 were injured. The estimated damage amounted to a sum of £ 27,455 (Rs. 2,74,550). In addition to the loss of property, 242 head of cattle were destroyed, and eighteen human beings killed. Atfter the flood was over, along the beach at Dumas, pieces of timber, reeds, bushes, parts of houses,

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FLOODS

IN 1937

as well as bodies of animals, deer, cows, bullocks, buffaloes, and an immense number of snakes, were deposited in a line stretching for more than one and a half miles, and in many places piled up to a height of nearly five feet. From inquires made at Surat in connection with this flood, it was found that within three years, at different places along the course of the Tapi, the depth of the channel had diminished from three to five feet. This silting up of the mouth of the river was at the time thought to be one of the causes of the special severity of the flood of 1837. With the object of providing the surplus waters of the river in times of flood with the means of escape, the construction of a channel known as the Warcha cut, beginning at the left bank of the Tapi near Fulpara, and running southwards to the Bhimpor creek, was sanctioned. At the same time to protect the front of the river where the stone walls had given away, frame-works of wood were built at a cost of £ 2,500 (Rs. 25,000).

In 1843.

After six years the Tapi again flooded its banks. In 1843, as in 1837, there were two district freshes on the river : one, on the 1st of August, accompanied by a strong south-west. wind passed off without causing any damage; the second, in the beginning of September, was more serious. The rise set in from about eight o'clock in the evening of the 6th, and went on increasing till 1 A.M. on the 8th, when the waters began to fall. As in 1882 and 1837. the river flowed over its left bank near the Rafi Tower, just above the north-west corner of the city wall, and, passing through the breaches in the fortifications on either side of the Wariav gate, flooded a great part of the north- east suburb. As on former occasions, its further progress south wards was stayed by the ridge of high land that runs across the city from the Katargam gate in the north, westwards to the Lal gate in the river front, about five hundred yards above the castle. Except behind the Chapat gate, immediately to the west of the castle, the rise of the ground prevented the flood from passing beyond the river gates. Through the Chapat gate however, enough water found its way to swamp the low lands immediately east of the castle, and unite with a district stream that, entering by the Mecca creek, was flowing through the part of the town known as the Chowk bazar. To the west of the city the larger portion of the torrent that had found an entrance by the Mecca creek covered almost the whole of the south-west suburb, reaching as far as the Athwa, Majura, Navsari, and Man gates on the west and south-west. Here it accumulated and was piled up many feet deep, escaping finally through the breach in the western wall between the Majura and Athwa gates, made by the flood of 1837. To the east of the city, at Fulpara, as in 1822 and 1837, the Tapi overflowed its left bank. Instead, however, of rushing westwards across the land, and dashing in a great body against the eastern wall of the city, the water is said to have found its way quietly along two hollows towards the Lal

FLOODS IN 1873

gate. Here, and further south near the Delhi gate, the flood poured into the ditch outside of the city, and, following the line of the wall towards the south, finally found its way into the Bhimpor creek. The measurements taken of the depth of the flood at different places in the north of the city would seem to show that the pressure of the flood at this part of the town was less than in 1837. At the Wariav gate, for example, the height of the flood was only ten feet instead of twelve feet nine inches, and at Katargam it was six instead of ten feet seven inches. So, too in the southern suburbs, where in 1837 they were piled up to a depth of from two to seven feet, in 1843 the waters only just reached the gates. Though no destruction of life was reported, this flood caused much inconvenience and loss of property. The local officers again recommended that the river front of the town wall should be strengthened and sluice-gates built to check the flood at the Meccca creek and in other places. None of these proposals would seem to have been carried out.

In 1849.

The next flood of importance took place in 1849. On the 19th September, about 2 a.m., the waters of the Tapi near Surat rose rapidly nine feet above high-water mark, and continued steadily to rise, so that by daylight a large portion of the city was flooded. At about 2 p.m., the surface of the river was found by the Executive Engineer to be twenty-one feet above high-water mark. Within the walls of the city boats were plying in several of the streets, and more than one quarter of the town was under water. Such was the violence of the current that two steamers, anchored in front of the castle, were obliged to leave their moorings and drop down the river. The flood began to subside about 7 p.m. on the 19th, and on the 20th communications were again opened between the different parts of the town. No lives were lost; but many huts, houses, and bridges fell in, or were seriously injured. A part of the wood piling facing the river near the Dutch wharf was also damaged.

Protective works 1869.

After 1849 the city continued at intervals to suffer from floods. But, except the digging of the Waracha cut (1838-40), up till 1869 nothing in the way of protective works was undertaken at Surat. In 1843 it would seem that the less violence of the flood was by some attributed to the relief afforded by the Waracha cuts. But of late years the opinion among the engineers who have chiefly studied the river, would seem to be that a channel of the capacity of the Waracha cut, even if filled to overflowing, would have no appreciable effect in lowering the level of the Tapi in time of flood. In 1869 the Surat municipality determined to do something to protect the city from the overflow of the Tapi. Any work that had for its object the raising of the left bank of the river either at Fulpara, or just above the city walls near the Rafi tower, required an expenditure which could not be met from municipal funds. It was therefore determined to limit the undertaking to the con-

CHAPTER 1.
Physical Features.
FLOODS
Protective works
1869

struction of such protective works as would keep the waters of the river out of the most thickly-peopled parts of the city during all floods except those of extraordinary severity. Beyond digging a ditch outside the Lal gate to carry off the local drainage, no attempt was made to stop the progress of such bodies of water as in 1822 and 1837 had reached the city walls from the east. In the north-west suburbs, near the Fatak and Wariav gates, where the population was scanty, and where, from the exposed character of those parts, protective works would be required on a large scale, no attempt was made to entirely keep out of the flood. But further down the river, below the castle, by stopping up the Mecca creek, and by raising the level of the ground at certain places behind the river front, it was thought that the richest and most thickly-peopled parts of the town might at small expense be saved from the entry of any water through the river front.

Recent floods.
1872-73.

Since these works have been completed four floods have occurred, one in 1872, one in 1873, and two in 1876. In 1872 (September 16th), in the north-west suburb, near the Fatak and Wariav gates, as in former floods, the river rose high enough to bring the greater part of the land several feet under water. On the other hand, the closing of the Mecca creek and the raising of the ground along the river front were found to be sufficient to keep out the whole of the flood from the western and south-western quarters of the city, and so to save great part of the town from much inconvenience and injury. During this flood the waters did not by several feet rise so high as they had risen on former occasions. The height of the river was estimated at about seventeen feet above spring-tide, and at the north-western corner of the town, at the Wariav gate, the water stood at eleven feet eleven inches instead of twelve feet nine inches as in 1837. As the water came within three feet of the level of the roadway at the Mecca creek, it was thought advisable to raise the height of the bridge. The second flood was about a year later, 1873, September 4th. The water rose to 92 feet on the Mecca creek bridge, or about 1.62 feet less than in the previous year. In neither case did the flood cause damage or last for more than twenty-four hours.

1876.

Of the two floods of 1876, one was due to a local fall of rain, and the other to the rising of the waters of the Tapi. On the 29th of August sixteen inches of rain fell at Surat in twenty-four hours. As the sluices at the Mecca creek were built to provide against an extreme fall of ten inches in the twenty-four hours, they failed to carry off the accumulations of the local rain-fall. In the south of the city, the Navsari bhagal market was flooded to the depth of four or five feet, and two persons were reported to have been drowned. Beyond this loss of life and the fall of a few houses no considerable damage was done. But a week later there came a second and more formidable flood. About eight o'clock on the morning of the

CHAPTER 1.
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FLOODS
Recent Floods
1876

5th September the river began to rise. The height of the water continued steadily to increase till, at eleven in the evening of the 6th, it had reached 96.75 on the Mecca creek bridge, a point 3.13 feet higher than the corresponding maximum in 1872. The water remained stationary at this extreme height for nearly five hours, or till about four o'clock in the morning of the 7th. Then it began slowly to subside, but did not reach its original level of seventy-six till six o'clock in the evening of the 9th, or after the flood had lasted for one hundred and six hours. Against this severe strain all the municipal inundation works stood well. No loss of lifo, and but little damage to property was caused. But for the protection of these works large parts of the city would have been inundated to depth varying from one to eighteen feet. The flood waters are said to have risen as high, or even higher, than they rose in 1849. Details for a satisfactory comparison are not available. But as no great body of water entered the city from the east, this last would not seem to have been so serious a flood as those of 1837 and 1822. Besides the height of the water at the Mecca creek, the following measurements have been recorded : under the Wariav gate fourteen feet, and under the Katargam gate six feet three inches ; at the castle the water in the ditch rose two feet on the over-bridge and passed half way to the inner castle gate.

A SHORT ACCOUNT OF TAPI FLOODS BETWEEN 1876 to 1959

After 1876* only one low flood occured in 1882 of a small duration In the year 1883 the flood rose to R.L. 100.00 (i.e. G T.S.R L. 36.22) whence some means to train the river flow to protect the bank in the vicinity of Surat city from erosion was investigated. It was proposed to throw numerous spurs at right angles to the direction of river flow along the Rander bank of the river and to encourage growth of trees near the banks. These measures seem to have been carried out between 1883 and 1885. They had some effect though not to the extent expected. The groynes etc. partially contributed to stoppage of further erosion and induced some silting. But these soon fell into disrepair and the condition became virtually the same as before.

2. The following table gives the yearwise occurrences of floods, frequency, and the maximum level attained at Hope bridge.

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*The floods in river Tapi affect normal communications when the river water rises above R. L. 88.00 *i. e.*, G T.S.R.L. 24.22 at Surat near Hope bridge and it may be termed as a flood in the river.

CHAPTER 1.

Physical Features.

FLOODS

1876 to 1959

TABLE No. 13

Year 1	No. of floods 2	Maximum level attained at Hope Bridge 3	Dates of occurance of the floods 4
1882 ...	1	97.00	12th September.
1883 ...	1	100.10	3rd July.
1884 ...	1	98.30	8th September.
1894 ...	1	97.75	22nd July.
1914 ...	1	97.00	17th September.
1930 ...	1	97.50	14th September.
1932 ...	1	93.00	—
1933 ...	1	98.00	18th September.
1937 ...	2	96.00	—
1940 ...	2	90.50	·
1942 ...	2	98.50	—
1944 ...	5	101 00	17th-23rd August.
1945	1	100 25	21st—22nd Sept.
1946 ...	2	91.75	—
1949 ...	1	—	—

It is significant that a flood of gauge reading of 101.0 has been reached only once in 70 years (1944).

During the year 1942 there were two floods of maximum duration of 4 days and six hours, the maximum water level reached being R.L. 99.25 (i.e. G.T.S.R.L. 35.47) The asphalt road between Surat and Rander was partially washed away while the road leading to Rander on the river bank was considerably eroded.

During the year 1944, there were 5 floods and the maximum duration was of 5 days and the maximum level reached was R.L 101.00 It is interesting to note that the flood was caused by the storms occurring in quick succession over a period of 7 days (from 17th of August to 23rd August). The precipitation during the first storm was higher than that during the second storm, but the second storm precipitating over a fully saturated catchment produced a bigger run off The asphalt road between Surat and Rander was washed away in major portion and road surfaces of other roads were badly affected. Rubble pitching near Hope Bridge was badly damaged. The pitching of the Rander road was also damaged. The low plinth buildings of the police lines had their floors sunk. About 200' of the city wall near Dutch Garden at its east partially collapsed. The wooden jetties were almost carried away by floods.

There was one flood during the year 1945 which lasted for four days and 3 hours. The maximum water level reached was 100.25 (i.e. G.T.S.R.L. 36.47). The effect of this flood was exactly the same as that of the previous year. The road to Rander was further washed away and also the pitching of the road was further damaged. The surface of other roads in the area and some cross-drainage works were also damaged. Some low level building had silt on the floor, the floor had sunk.

The effects of 1944 and 1945 floods were so severe that Government decided to construct a new road between Rander

CHAPTER 1.

Physical Features.

FLOODS 1876 TO 1959

and Surat known as Rander diversion for National Highway No. 8. This diversion road was completed in the year 1948-49 at a cost of Rs. 7.4 lacs.

The Municipal water works near Nanavarachha were also badly damaged during the floods of 1944 and 1945. The infiltration wells were damaged to a great extent.

During these floods the towns of Rander and other villages on the bank, viz., Bhatha, Bhatpore, Umra, Dumas were very much affected and certain houses were rendered in imminent danger due to bank erosion. Rubble pitching costing about Rs. 13,500 was provided for protecting the bank at Rander.

The problem was tackled after the floods of 1944 and 1945 and a special sub-division was opened by Government to collect data. Experiments were carried out at Poona at Central Water Power, Irrigation and Navigation Research station and the problem was under study by the Director by performing model experiments.

During the year 1946 there were two floods. The maximum duration was two days and 15 hours, the highest water level being 91.75 (*i. e.* G.T.S.R.L. 27.97). There was no appreciable damage in this year. In the year 1949 on the 8th of September, the flood water rose to 98.25 (*i.e.* G. T. S. R. L. 34.47.) In subsequent years, up to 1953, there were no appreciable rise in floods but during the year 1954 there was one flood on 30th September, 1954 with a duration of eight days and 17 hours. The maximum flood level reached was 100.75 (*i. e.* G. T. S. 36.97). The portion of the city wall near Dutch Garden collapsed in a length of about 180'. The cost of reconstructing this portion was Rs. 5.5 lacs This flood, however, caused unbearable loss of property at village of Bhatpore. The entire village was severaly attacked. About 147 houses costing about Rs. 3.2 lacs were destroyed. Besides this about 50 acres of cultivable land costing about Rs. 1.34 lacs was washed off.

After carrying out a number of experiments the Director of Central Water, Irrigation and Navigation Research Station, suggested the construction of two submersible repelling groyne of loose rubble, one on the left bank of Surat and the other on the right bank near Rander. The groyne at Surat was completed in 1955 at a cost of Rs. 6.5 lacs, and its effects are under observation. The groyne at Rander is estimated to cost about Rs. 6.5 lacs, and is still to be taken up.

During the year, 1955 there was no flood in the river.

CHAPTER 1.

Physical Features.

IRRIGATION PROJECTS

APPENDIX III

Though no lands are at present (1876) irrigated from the Tapi, several projects have from time to time been framed with the object of using the waters of the river for this purpose. About the year 1856 Captain Trevor, of the Bombay Engineers, drew the attention of Government to the admirable sites for irrigation works presented by some of the rocky barriers that, in the east of the district, cross the channel of the Tapi. Three years later Captain Chambers, an officer with special knowledge of the Madras rivers, was selected to draw up a report on the rivers of Gujarat ; and in the following year he submitted a scheme of combined irrigation and navigation for the Surat collectorate. Three sites had been pointed out by Captain Trevor as suitable places for irrigation works. These were the rocky barriers at Kakadapar, sixty-two miles from the mouth of the Tapi; at Puna, about eight miles lower down; and at Waghecha, about six miles below Puna. In Captain Trevor's opinion, Kakadapar, the highest of these three sites, as commanding a much greater area of culturable land, was the most promising place for building a weir. On the other hand, the great depth of cutting required for canals taken from the upper rapids, and the long distance during which the water of the canal would continue to flow under the level of the country, led Captain Chambers to recommend the lowest site, that is, the rocky barrier at the head of the Waghecha rapid. At this place he proposed to cut two canals, one on the right bank of the river running north-west and the other stretching to the south from the left bank. Of these canals, that on the right bank, with a total length of about twenty-one miles, should, he proposed, pass nearly parallel to the course of the river for ten miles to the town of Gala, and should then extend eleven miles further towards the north-west to near the village of Rundh. This northern branch, it was calculated, would command an area of not less than 140,000 acres of land belonging to the Surat district. Captain Chambers' proposals for the irrigation of the lands on the left bank of the river were on a larger scale. He suggested the construction of a canal with a length of fifty miles running to the south-west as far as the Auranga river near Bulsar. In addition to the advantages to be obtained from this canal for purposes of irrigation, it was proposed to make it navigable. From June to December, it was estimated, there would be water enough for vessels of six feet draught, and at other seasons enough for boats drawing four feet of water. Besides this main canal Captain Chambers proposed to carry a branch navigation canal westward from the village of Mota to Surat, a distance of about fifteen miles. The area of land commanded by the proposed irrigation works on the left bank of the river included 375 square miles, or above 180,000 acres in the Surat district, of which 120 square miles, or 60,000 acres, were in the immediate neighbourhood of the city of Surat. The total cost of the works proposed on both sides of the river was

estimated at a sum of £ 367,500 (Rs. 36,75,000), and it was calculated that if a water rate of 4 S. (Rs. 2) an acre was levied, the scheme would yield a return of over eight per cent.

CHAPTER I.

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IRRIGATION PROJECTS
Colonel Trevor's Scheme, 1867.

• Nothing more was done in the matter of Tapi irrigation till, in 1867, Colonel Trevor was appointed to report on Captain Chambers' project. This officer drew up a fresh and more extensive scheme, fixing the site of the dam at the spot he had originally recommended, Kakdapar, fourteen miles above Waghecha. The cost of completing this project, Colonel Trevor estimated at £1,320,000 (Rs. 1,32,00,000). He calculated that the net receipts would represent a return of ten per cent. on this outlay. These proposals were not, however, approved, and in 1871 a fresh scheme was drawn up on a smaller scale. The spot selected for the weir was at the head of the Waghecha rapids, the site formerly chosen by Captain Chambers. The proposals for irrigation were confined to the lands on the right bank of the river, a total area estimated at about 340,000 acres lying between the river Narbada on the north, the Tapi on the south, the Bombay, Baroda and Central India Railway on the east, and the Gulf of Cambay on the west. The cost of this project was estimated at slightly less than £ 440,000 (Rs. 44,00,000). From the 340,000 acres which the canal commanded, it was calculated that a yearly revenue would be recovered representing interest at the rate of nineteen per cent on the original outlay. On further inquiry, it was found that, though the canal commanded so large a tract of land, the actual area likely to yield a special irrigation revenue was not more than 123,000 acres. This diminution of area would, it was estimated, reduce the probable return from nineteen per cent. to four and a half per cent. by the end of the first seven years, rising, after seven years more, to nine and a half per cent. Under these circumstances no steps have yet (1876) been taken to carry out the proposed scheme.

Principal Details.

The principal features of the project as finally drawn up are a masonry weir across the Tapi at Kamlapor, a distance of thirty-five miles above the city of Surat. At this point the channel of the river, through almost its whole breadth, consists of a bed of exposed trap rock. The design for the weir is 2,440 feet long and its crest twenty-seven feet above the hot-weather level of the river. Including flank walls and embankments the estimated cost of this work is £40,100 (Rs. 4,01,000). From this weir a canal is led away in a direction nearly parallel to the stream, and about two miles from its bank. This, which is called the main canal, and has a maximum carrying capacity of 650 cubic feet per second, is taken on for sixteen miles to a point in the Baroda village of Akhakhol. For the first ten miles the country is rough and broken, and the works heavy. In some places the channel has to be cut almost entirely through rock ; in other places water-courses have to be crossed by masonry aqueducts. Of these aqueducts the two heaviest, costing £8,400 (Rs. 84,000) and £13,700 (Rs. 1,37,000) respectively, occur at the second mile across the Wareli river, and at the tenth mile across the bed of

CHAPTER 1.

Physical Features.

Irrigation Projects

the Usked. After the tenth mile the country grows gradually less and less broken till, to the west of the railway line, where the chief part of the irrigable lands lie, it is almost a plain, sloping slowly to the sea. The total cost of the main canal is estimated at £150,000 (Rs. 15,00,000). At the village of Akhakhol the main canal divides into two branches. Of these, one turning westwards, passes through the lands of the Olpad sub-division ; the other, keeping to the north-west, crosses the river Kim and enters the Ankleshwar sub-division of the district of Broach. The Olpad branch, with a maximum carrying capacity of 421 cubic feet per second, and a total estimated cost of £27,700 (Rs. 2,77,000) passes for seven and a half miles through an easy country till it crosses the railway line. Beyond the railway the main branch separates into two channels, one running to the west, the other to the south-west, and between them commanding the irrigation of the Olpad lands almost to the coast. Besides these two channels it is proposed that a third, leaving the main Olpad branch a little before it crosses the line of railway, should at no great distance from the railway pass southward to the Tapi. Here it is proposed to lead the water in troughs under the Tapi railway bridge, supplying drinking water to the city of Surat, and irrigating the lands in its neighbourhood. Passing northwards the Ankleswar branch crosses the Kim river about seven miles above the railway bridge. It then bends to the west and crosses the railway four miles north of the Kim station. From this it passes along the west side of the railway, throwing off towards the west two large channels, which run through the Ankleswar sub-division nearly to the coast line. Exclusive of the two channels the total length of the Ankleswar branch is twenty-four miles, and at commencement its maximum carrying capacity is 235 cubic feet a second. The heaviest work on this branch is the aqueduct across the Kim river, estimated to cost a sum of £5,400 (Rs 54,000). The cost of the entire branch is calculated at £45,000 (Rs. 4,50,000).

CHAPTER 2—HISTORY

HINDU PERIOD C.-300 B.C. —— A.D. 1299.

CHAPTER 2.

HINDU PERIOD

Mauryan Period (C. 319 B.C.-200 B.C.)

ACCORDING TO TRADITIONAL ACCOUNTS, the area which is comprised in the present district of Broach to the north of Surat was colonized by the Bhrigus, or alternatively by a king from Sauvira. Later it came within the realm of king Pradyota of Ujjain. Whether any of these rulers extended their way further south up to the present Surat is not known. But it seems clear that since inscriptions of Asoka have been found from Sopara near Bombay and Girnar in Saurashtra, the intervening region of Gujarat, including the present Surat District (which was known as Lāta from at least the 2nd century B. C. until so late as the 13th century A.D.) must have been under the Mauryās at the time of Asoka (B. C. 273-236). As Asoka is not credited with any conquests in Western India, it is likely that the whole of the Surat district, along with other parts of Gujarat, might have been conquered by Chandragupta Maurya (C. 319 B. C.) This is corroborated by the inscription of Rudradāman at Girnar, wherein it is stated that the Sudarsana lake was constructed by Vaishya Pushyagupta, a Rāshtriya (governor) of Chandragupta[1]. The Mauryan power established by Chandragupta continued at least upto the death of Asoka (C. 236 B.C.). It is not known whether Surat was under his successor Samprati or not. But it seems certain that with the weakening of the Maurya power at the centre, western India, including Surat, may have thrown off its yoke by about 200 B.C.

The history of the period after the Maūryās is confused. We do not know who the successors of the Mauryas in this district were. It is very likely that the Sungās who succeeded the Mauryas in the east did not come to this part. About 230 B.C. Satavahanas rose to power in the Deccan. Though there is no evidence to know whether their rule extended to Broach district or not in the second century B.C., the southern part of Surat district adjoining Thana and Nasik, forming the ancient Aparanta, was definitely under them.

Indo-Greeks (180 B.C.-100 B.C.)

Until recently it was believed that Appollodutus and Menander of the Indo-Greek (or Bactrian) family had ruled in

1. Epigraphia Indica, Vol. VIII, p. 41 ff.

CHAPTER 2
History
HINDU PERIOD

Gujarat, since their coins were found to be in circulation at Barygaza[1]. But this view is now strongly disputed[2]. Whatever it be, the Greeks were defeated by the Sakas who advanced from Seistan and conquered Abiria on the Indus. Advancing southwards they took Patalene and the Greek provinces of Cutch and Saurashtra. They might have also ruled possibly Gujarat and in consequence Surat district ; at least its northern part might have been under them for some period. The tradition prevalent in this part of the country mentions that they were driven away from Ujjain by 58 B.C[3] Whether at this very time they lost Gujarat and Saurashtra also or not is unknown.

Kshaharatas and Satavahanas (C. 100 A.D. 125 A.D.)

The Kshaharatas who seem to have been the Kshatrapas or officers under the Kushana emperor Kanishka I and his successors were overthrown by the Satavahanas somewhere about 125 A.D.[4] The existence of the rule of the former is also indicated by the discovery of coins with elephant, tree and other symbols, and an inscribed copper coin of Siri Satakani from Karvan, about 25 miles to the north-east of Broach, and others from Kamrej in Surat district[5]. With the Kshaharata rulers Bhumaka and Nahapana, we get for the first time some information about the district. Records of the Kshaharatas around Poona and Nasik show that Northern Maharashtra was in their possession. It seems probable that coastal districts known as Lata and Aparanta also lay within the dominion of Nahapan[7]. Whatever it be, Ushavadata (Rishabhadatta), a son-in-law of Nahapana takes pride in proclaiming that he provided ferries on the rivers Dahunuka, Damana, Parada, and Tapi[6]. This is the earliest (and so far the only) mention of these rivers of southern Gujarat. They have not only retained their names practically unchanged for the last 2,000 years, but Damana, Dahanu[8], and Pardi, all important towns now, are named after them[9]. Incidentally, the establishment of ferries indicates the existence of a fair-weather road along the coast.

In, or soon after A.D. 124-125 the Kshaharatas were driven out from Western India by Gotamiputra Satakarni.* and Aparanta, including Surat district, passed into the hands of the Satavahanas.

1. Tarn, W. W., *The Greeks in Bactria and India*, (2nd ed.) p. 149.

2. Narain, A. K., *The Indo-Greeks* (Oxford 1957) pp. 68-69, 93.

3. Sankalia H. D., *Archaeology of Gujarat*, p. 10. This view is subject to alteration as mentioned above.

4. The Age of Imperial Unity ; Bhartiya Vidya Bhavan, pp. 179 and 182.

5. See Journal, *Numismatic Society of India*, XII, pp. 26-30.

6. Nasik Ins. No. 1131. "List of Brahmi Ins. by Luders", Epigraphia Indica, Appendix to Vol. X, p. 125.

7. The Age of Imperial Unity (1953), p. 181, Bhartiya Vidya Bhavan.

8. Dahanukanagara occurs in Ins. No. 1135. *Ibid.*, p. 127.

9. Usavadata had also granted cocoanut trees in Chikhalipadragrama in Kapura-ahara, according to Ins. No. 1133. This is identified *with Chikhalda, near Kapura,Songadh Taluka*. But this identification seems to be wrong. Chikhalda or Chikhalapada is far away from the coast and not likely to grow so many cocoanut trees. There is another Chikhli, about 30 miles southwest of Navsari, which appears to be more likely.

*The Age of Imperial Unity (1953) p. 206, Bhartiya Vidya Bhavan.

CHAPTER 2

History.
HINDU PERIOD
Kshatrapas
(C. 125-304 A.D.)

This Satavahanas or Andhra conquest was short-lived, because we find by 150 A.D. another "House" ruling in this area. These were the Kardamakas who were the descendants of Chastana, the son of Ghsamotika (or Ysamotika). His grandson Rudradaman I was a very powerful ruler, who held sway over large parts of Western India. He is credited in the Junagadh inscription with the conquest of Satakarni, lord of the Daksinapatha, and all the countries previously conquered by Gautamiputra, including Aparanta. Thus, Surat District must have passed under the control of the Kshatrapa rulers. Many of these rulers are known through an excellent series of silver coins which imitate the Greek drachmas[1]. The district might have been reconquered temporarily by Yajnasri-Satkarni (A.D. 174-203) of the Satavahanas in the course of his all out drive against the Scythians from Aparanta and parts of Western India[2]. After this, the district might have come under the sway of the Abhira Isvarasena. He and his successors ruled, probably, for 67 years.

Kshatrapa Branch Line
(304-390 A.D.)

Towards the beginning of the 4th century A.D. the Chastana family of the Kshatrapas lost their power and a new house of Kshatrapas is seen ruling over this area. Kshatrapa Visvasena is possibly the last ruler of the old branch and he was succeeded by Kshatrapa Rudrasimha II, the son of Svami Jivadaman who might have been the relative of Visvasena. The last ruler of this line is Svami Rudrasimha III. During his life time, probably in the first decade of the fifth century A.D. Gujarat was annexed by the Guptas.

Guptas
(390 A.D.-470A.D.)

The Gupta ruler who successfully defeated these Kshatrapas was probably Chandragupta II. The discovery of the coins of Chandragupta II, Kumargupta, and Skandagupta in central Gujarat (Anand) suggests that at least this region formed a part of the Gupta empire.

Traikutakas
(470-500 A.D.)

Taking advantage of the weakening of the Gupta power, a part of their western empire was possibly conquered by the Traikutakas from south Gujarat and Konkan. A number of coins and three copper plate grants which are so far available give us the names of Maharaja Indradatta, his son Dahrasena. A.D. 456-47, Samvat 207), and his son Vyaghrasena (A.D. 490-91, Samvat 241)[3]. These Traikutakas boast of having performed an *asvamedha* (horse sacrifice) ; and date their inscriptions in their own specific era, now identified as the Kalachuri era. The region around Surat was definitely in their possesion. The Narmada might have served as a boundary between the Trai-

1. For a fuller history of the period see *The Age of Imperial Unity* (Bhartiya Vidya Bhavan, 1951), pp. 178-216.

2. The Age of Imperial Unity (1953), p. 206 ; Bhartiya Vidya Bhavan.

3. For a detailed history of the period see *The Classical Age* (Bhartiya Vidya Bhavan, 1954), pp. 60-66, 177-78, 190-97.

×The Classical Age, p. 19.

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kutakas and the northern rulers. Under them Aparanta was called a *desa*[1]. Three of its major sub-divisions were Kapura-ahara,[2] (Kapura on the Mindhola, and three miles south-west from Vyara in the Songadh Taluka) and Antarmandali-Vishaya, that is the Purna-Mindhola *doab*, and Iksharaki-ahara. Within the last named was Purohita-pallika, a Brahmana settlement, as its name implies. Twenty-five miles west of Kapura was Amraka, which is identified with Ambachh, and the village Kaniyas-Tadaka Sarika, identified with Tarasdi. All these are in the Songadh Taluka of the Surat District.

Katachchhuris (520-610 A.D.)

By about 500 A.D. the power of the Traikutakas was probably crushed by the Vakataka king Harishena whom an Ajanta inscription[3] credits with victory over Lata and Trikuta. It is possible, therefore, that the Vakatakas might have been the over-lords of Surat district for some time On the evidence of a copper plate grant discovered at Banaras it is said that a raja of Sur dynasty who was a feudatory of Trikutakas began to rule in the Surat region after the fall of Trikutakas and Vakatakas soon became his overlords. Unfortunately the dating of the copper plate is based upon a very slender evidence and therefore the position of Sur dynasty as independent rulers of Surat is not beyond doubt. After C. 520 A.D. Vakatakas are heard of no more. The district next seems to have come under the suzerainty of the Katachchhuris. It is known from other evidence that they ruled Western Malwa, Konkan and Northern Maharashtra, and their vassals had donated some villages in the Broach and Baroda districts. So this district must have been under them, though so far we have no inscriptions or plates to support this hypothesis. The Katachchuris were ousted from Gujarat by the Chalukyas of Badami by about 609 A.D. But slightly earlier the country to the north around Broach had come under the Gurjars (later called Gurjaras). Except their grants which are regarded as forgeries none of their other records refer to places in Surat district. The forged grants mention the following :—

One of the territorial units, Kasakula-Vishya lay to the north of the Tapi. Of the few villages referred to, Sunthavadaka is definitely Sunthwad in the Chikhli Taluka. On the southern bank was situated the Kamaniyabhukti which included 116 villages (if the interpretation is correct). Under the Chalukyas this was called Karmaneya-ahara. Further south-east lay the *ahara* of Tatha-Umbara or Bagumbra[4].

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1. *Eigraphia Indica*, Vol. XI, p. 220.
2. *Ibid.*, Vol X, p. 52.
3. *Archaeological Survey of Western India* (New Imperial Series). Vol. IV, p. 127.
4. *Indian Antiquary*, Vol. XVII, p. 193-94.

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Western Chalukyas and Sendrakas

Lata, or southern Gujarat of which Surat district formed part had been conquered by the Western Chalukyas of Badami from Katachchhuris in about 610 A.D.[1] Among the vassal kings of the various petty divisions under them, information is available only about Sendrakas. Evidence of the actual establishment of the Chalukya rule in Gujarat cannot be had till about 670 A.D., though traces of the earlier (C. 650 A.D.) Kannada penetration in the district are afforded by the grants of Sendrakas. Contemporary with the Gurjars, the Sendrakas were a feudatory family of the Chalukyas of Badami which ruled in Khandesh and parts of Broach and Surat districts. Three new copper-plate grants dated in the Saka era have been recently published[2]. These and the previously known[3] plates give the following geneology :—

- Nikambha or Bhanusakti
- Adityaraja or Sakti
- Nikumbhallasakti or Allasakti 653 A.D., 655 A.D. (2)
- Jayasakti 680 A.D.[4]

While the place names mentioned in the grants now fall outside the West Khandesh district, the Nagad Plates refer to a donation made by Nikumbhallasakti when he was camping near Shri Kayavatara-*tapovana*. This is Karvan, the famous *tirtha* associated with the *avatara* of Siva as Lakulisa. It is also mentioned in Gurjara records.

From this new information it would appear that the old Katâchahhuri empire was split up into several fragments. Southern Gujarat or the coastal tract was ruled directly by the Chalukyas. The hinterland or the Desha now forming the eastern parts of Surat and Broach districts and including the Khandesh districts, was given to the Sendrakas, while the Gurjars occupied the region around Broach and Baroda. It is interesting to note that Nandipuri, the capital of Gurjaras and later of the Chalukyas, was perhaps an important, strategic place, for the place leading to it is called "Nandipuridvara." This is the present Nandurbar, some 60 miles south-east of Nandod.

Of the four grants, one from Bagumra of Nikumbhallasakti actually donates Balisa (=Vanesa) in Treyanna-ahara-vishya.[6]

1. For a fuller history of the dynasty see *The Classical Age*, pp. 227-48.

2. *Epigraphia Indica*, Vol. XXVIII (1950), published in 1952, pp. 195-205, and Vol. XXIV (1952), published in 1955, pp. 116-121.

3. *Indian Antiquary*, Vol. XVIII, p. 265.

4. One more Sendraka grant from Mehunabare, East Khandesh district, of Saka 624 (A. D. 702) has been discovered. It mentions Devasakti, his son Dandiraja, and his son Vairadeva, the donor. *Indian Archaeology*—A review, 1957-58, p. 56.

5. See below p.

6. *Ibid* p. 266.

CHAPTER 2 — History — HINDU PERIOD — *Chalukyas.*

That is Ten near Bardoli. It was the headquarter of a district. From other grants we learn that parts of Broach, Surat and the adjoining West Khandesh were under the Sendrakas.

From A.D. 670-740 sons of Dharashraya Jayasimhavarman (brother of the Western Chalukya emperor Vikramaditya I), Srayasraya Siladitya (A.D. 669-692), and the latter's son Avani Janasraya Pulakesiraja (A. D. 738-39) and perhaps Nagavardhana ruled, not as feudatories, but as independent kings of Lata.

Land grants were made to Brahamans in the district, and of the villages and larger territorial units mentioned in this connection the following are identified :

> Alluraka=Alur, Asattiagrama=Astgam (Navsari) Balisa=Wanesa in Treyanna-ahara ; Osumbhala= Umbhel, (Bardoli Taluka) in Karmaneya-ahara[1] (Kamrej).
>
> Pariyaya =(Pariya) and Sandhiyar (Sandhyar) Olpad Taluka in Kasakulavishya.[2]

The names of territorial units and other places mentioned in Chalukya records indicate that the dominion of the Western Chalukyas of Navasarika extended in the north the Narmada or even beyond to Khetaka (Kaira) ; in the south it was linked up with that of the Imperial Chalukyas; in the south-east it included the modern district of Nasik; the capital was at Navsarika (modern Navsari), which seems to have been newly founded then.

The inscriptions do not give any hint of the relations of the Chalukyas with the Gurjaras of Broach, nor does it come forth from the records of the latter. But it is possible that since the time of Pulakesi II, the Chalukyas were at times nominal overlords of the Gurjaras. An important event, however, took place in the closing years of the Chalukya rule. Arabs, perhaps under Junaid, the Governor of Khalifa Hasham (A. D. 723-43) overran the contemporary kingdoms of Sindh, Cutch, Saurashtra and those of the Chapotkatas, Mauryas of Chitor, and the Gurjaras of Bhinmal. Their inroad further southward into the country was effectively stopped by Pulakesi Janasraya [3]

For the next 250 years, the district was under the Rashtrakutas (A.D. 740-975). For the first nearly 65 years (740-808 A.D.),

1. Vienna Oriental Journal, p. 235.

2. *Indian Antiquary*, Vol. VII, p. 241 and Vol. XVII, p. 197.

3. For detailed references see Sankalia, H. D., *The Archaeology of Gujarat* p. 19, and *The Classical Age*, pp. 155, 172, 248.

it remained under the rulers of the main branch *viz.*, Indra I, Dantidurga III, Krishna I, Govinda II, Dhruva I and Govinda III. The whole of Lata, as far as the Mahi in the north, had been conquered by the first two kings. The last named of the list *viz.*, Govinda III gave the Latamandala to his brother Indra who became the founder of the younger branch of the Rashtrakuta family ruling over Lata*. This Indra was succeeded by his son Karkka[1], who ruled for nearly 15 years, though it appears that this was interrupted, for some reasons not fully known, by the rule of his brother Govindaraja. It is also possible that the two brothers ruled conjointly, as indicated by a recently published record[2]. Dhruva II, son of Karkka, came to the throne in about 845 A.D. He died while fighting with Amoghavarsha of the Imperial line to retain his independence. He was succeeded by his son Akalavarsha, and the latter in his turn by Dhruva II. He had a brother named Dantivarma, and it appears that the two brothers probably ruled conjointly for some time. His son Krishna Akalavarsha was the last ruler of the Gujarat family of the Rashtrakutas. After him the suzerainty over Lata, both to the south and north of the Tapi, passed over to the main Rashtra kuta line.

Thus Amoghavarsha, Krishna Akalavarsha, Indra Nityavarsha, Govinda IV and V, Khottiga and Krishna III governed Lata as emperors, through their officers and feudatories. One of the latter was Parmara Siyaka who as Mahamandalika—Chudamani was in charge of the country north of the Mahi. Who was the governor of the southern region, Lata proper, is not known[3].

Under the Rashtrakutas the boundaries of Lata went on expanding. In all the earlier grants, the villages are granted in the Kheda and Broach districts. Later under the Gujarat Rashtrakuta, the limits of Lata extended from the Mahi in the north to Daman, the Konkan not forming actually a part of it, but a southern province. The country was divided into various territorial or administrative units. Lata is both called a *desa* and also a *mandala*. Under these were smaller units ; *vishaya*, *ahara*, *bhukti*, groups of villages, and the smallest, a village. In the present Surat district, the country north of the Tapi now comprised by the Olpad and Chorasi talukas was called Kantara-grama-vishaya, Kantara being no other than Katargam. Under it was the Trenna or Tena-ahara, Tena being Ten near Bardoli. In the former there was a Buddhist *tirtha* called Kampilya on a small river known possibly as Maddapi, and the

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1. So far we have 9 land grants of these rulers : 5 of Karkka Suvarnavarsha, and 4 of his brother Govinda dated between Saka 732 (A. D. 810) and Saka 749 (A. D. 827).

2. *Epigraphia Indica*, Vol. XXVI, p. 251.

3. For a detailed history of the dynasty see The Age of Imperial Kanauj, pp. 1-16, and 19-39, 98-103.

*The names Indra and Dhruva appearing in this line of succession should be carefully distinguished from Indra and Dhruva of the main branch referred to above.

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village Kammanija (=Kamrej) and Karanjavashika (=Karanj), both in the Chorasi Taluka. Farther east in the Bardoli taluka were Mottaka (=Mota), a Brahmana colony, Varadapallika (Bardoli) and Vavviyana (Baben). South of the Tapi were Dhadayasaha (=Dhundesa), Lingatadagika (=Sankar Talavadi), and Vaddvali (=Valod) in the Mahuva Taluka; whereas in the Palasana Taluka may be located Valisa (=Vanesa) and Umbara (=Bagumbara). Though Surat had not yet developed as a port, two others, Samjana (=Sanjan) and Variavi (=Variao) are mentioned as *pattanas*. The latter was the headquarters of a territorial unit called Variavi-*shodasa*—grama which formed a part of the Konkanavishaya. Variavi's position a little north and upstream on the Tapi suggests that it served the same purpose as Surat did later in the 16th century. And if it served as a port, then it means that the tides reached further upwards, beyond Surat, in the 9th century.

Chalukyas of Nandipuri.

Taila II, a descendant of the Western Chalukyas replaced the Rashtrakutas in the Deccan and Karnatak in about 973 A.D. One of his generals, and possibly a relative, one Barappa, was placed in charge of Lata. The region north of the Narmada was conquered by the Parmaras. Either as a measure of security or owing to some reasons unknown today, these Chalukyas preferred to have their capital at the old Nandipuri of the Gurjaras, that is far away from the coast, in a forest and hilly country. The dynasty—known as Nimbarka from a recently discovered grant[1] inscription-had six rulers (1) Barappadeva, (2) his son Goggi (or Goragi)-raja, (3) his son Kirtiraja, (4) his son Vatsaraja, (5) his son Tribhuvanpala and (6) his son Trivikramapala.

Barappa and his descendants had to fight with the Chalukyas (or Solankis) of Anhilvad Patan, the main bone of contention being the coastal tract with its ports and fertile lands. Lata changed hands at least twice during this period. Mularaj and his son Chamunda tried to wrest it from the hands of Barappa, but failed. Karna I's grant from Navsari shows that he had succeeded in getting possession of Lata in Saka 996 (A. D. 1074)[2], but within three years, in Saka 999, it was reconquered by Trivikramapala,[3] Karna having been defeated on the Vishvamitri near Baroda. Not only this but the (general's) son Padmadeva was rewarded with a *jagir* of 500 villages in Astagramavishya which was situated in Nagasarika-mandala. It appears that at this period Navsari was the headquarters of the province (mandala). It had at least two smaller units under it, *viz.*,

1. Pandya, A. V., "Some Newly Discovered Inscriptions from Gujarat", in *Journal, Vallabha Vidyanagar*, 1958, p. 3H.

2. Slightly earlier this region was conquered, probably for a brief period by Shashtha II, of the Goa Kadamba family, as would appear from his Gandevi Inscription, Saka 964 (A.D. 1042). Gadre, A. S., *Important Inscriptions from the Baroda State*, (Baroda 1943), pp. 64-71.

3. Sanja Plates, *Journal, Vallabha Vidya Nagar* 1958, p. 4.

Vatapadra (Baroda) *vishaya*, and Astagramavishaya[1] probably the same as Astagama[2].

Trilochanapala had earlier[3] granted in the Lata-desa, in the Vilishvara-pathake in Erthana 900, the village Erthana. A number of other villages around this are mentioned. And we may identify some of these with Baleshwar or Balesar (= Vilisvara) Bonad (=Bahunadasiva), Lingad (=Lingavata-siva), Erthan (= Erathana), Kuruna-grama (= Karan), Nagod (=Nagamva), Tantathalia (=Tantika). Talodra (=Talapadraka), Timbarwa (=Tembaruka), Vadadla (Vatapadra) in the Palasana Taluka and all within a radius of 12 miles south and east of Surat.

Earlier Karna I had granted[4] Dhamanachchha in Talabhadrika—36 in Nagasarika-vishaya in Lata-desa. Dhamanachchha is Dhamdhachha in Gandevi Taluka, while the boundary villages Amvalasadhi, Kalagram Kolwa, Kachhavali, Rai and Toranagrama are Amalsad, Kachholi, Ajrai and Torangam respectively in the Gandevi Peta, west of the Ambika river.

Thus many places in the Surat district go back to at least 1,000 A.D., of which Navasari first came to prominence in the Chalukya period.

How long the Surat district remained under the Chalukyas of Patan is very difficult to say. Lata was frequently the bone of contention between the rulers of the Deccan, *viz*., the Chalukyas of Kalyan and later the Yadavas of Devagiri. The region or its sub-divisions changed hands at very short notice. This went on until 1299, when the Muslims finally conquered Gujarat and within a decade or so the Deccan.[5]

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Early Muslims

Sacked by Musalmans, in 1194.

Various views have been expressed regarding the identity of Surat in mediaeval times.[6] Some of the Musalman local

1. *Ibid*
2. See p. 7 above.
3. *Indian Antiquary*, Vol. XII, p. 202.
4. *Journal Bombay Branch, Royal Asiatic Society*, Vol. XXVI (1924) p. 268.

5. For a detailed history of the period see *The Struggle for Empire*. (Bharatiya Vidya Bhavan, 1957) pp. 70-72, 74-81, pp. 161-82, 184-88, 185-96.

6. Sir, T. Herbert (1626) identifies Surat with the Muziris of Ptolemy (Har., I., 411), and Ogilby (1660-(1685) with Ptolemy's Syrastra (Atlas, V., 211). More lately Surat has been supposed to be Hiouan Thsang's (625-640) Sow-ra-ta, a trading city on the western shore near Gujarat.' But this, according to Reinaud (Mem. Sur. l' India, 156), is not Surat on the Tapi, but Sorath or Kathiawar, and this view is now generally received. Reinaud (as above) states that the Persian and Arab writers,

historians[1] state that in 1194 Kutb-ud-din, the general of Muhammad Shahab-ud-din Ghori (1193-1205), after he defeated Bhim-Dev, the Rajput king of Anhilwara[2] in northern Gujarat, penetrated as far south as Rander[3] and Surat. Surat was then part of the possessions of a Hindu chief whose head-quarters were at Kamrej, about thirteen miles to the east of Surat. This chief took refuge in a garden at Surat, but finding resistance hopeless, submitted and was restored to his possessions at Kamrej by Kutb-ud-din.

Long before Surat came into prominence, Rander was the principal commercial centre south of Broach. It was a very ancient town where Arabs from Kufa came and settled some time about 1225 A.D. They succeeded in overpowering the Jain population of the town and became its rulers. They were enterprising navigators and successful merchants trading with Malacca China, Tenasarim, Pegu and Sumatra in spices, silk, musk, porcelain and other commodities. According to Barbosa their women were beautiful and did not observe purdah. Their houses were well furnished and nicely decorated and they exhibitted excellent china-work in their drawing rooms. These Arabs were calld Navayats-- literally, from Sanskrit Nava Ayat, new comers.[4] As the prosperity of Rander declined in the sixteenth century, on account of the raids of the Portuguese, Surat began to assume importance. The port of Surat enjoyed great prosperity in the 16th, 17th and 18th centuries. With the rise of Bombay, it ceased to be a port of importance. As Surat is

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do not begin to speak of Surat till after the 12th Century Abbe Reynal (Settle E. and W. Indies, II, 28) says, 'at the beginning of the 13th century Surat was nothing more than a mean hamlet; and in this statement he is supported by D'Anville (Eclairt. Sur la carte de l'Inde, 74). At the same time, the fact that the city of Surat is still by learned Brahmans called Suryapur, and that the common story to explain the origin of the name Suryapur refers to a time (1500-1520) when Surat was already a city of great trade (see Barbosa quoted below), would seem to make it possible that modern Surat is built on the site of the Old Hindu town of Suryapur. This Suryapur is mentioneed (Ras Mala, I., 61) along with Broach as one of the places through which (about 990) the Anhilwara troops passed on their way south to attack the chief of Lath. Again, the name Suryapur resembles Surabaya, Ibn Istakhri's (951) from of the name generally written Subara or Sufara This port is placed by him four days south of Cambay, and about five days north of Sindan (Sanjar), and three miles (½ parasang) from the sea. Elliot's India, I, 30) The references to Suryapur and to Sufara are, however, confused, and seem scarcely sufficient to show that in 10th century there was already a town on the site of the modern city of Surat.

Sir Monier Williams in his 'modern India and the Indians' suggests that the old name of the town was Suraj (Sanskrit Surya), city of the sun. 'A Muhammadan ruler wishing to change its Hindu name into one more significant Muslim domination converted Suraj into Surat, a chapter in the Kuran (page 267). The author however does not refer either to the name or to the date of the Muslim king who made the change.

1. This is mentioned in two local histories--one by Bakshi Mia Walad Shah Ahmad, the other by Munshi Ghulam Mohi-ud-din.

2. Anhilwara (North lat 230° 48' East long. 72° 2'), Nehrwala or Patan, 65 miles north-east of Ahmedabad.

3. Rander, on the right bank of the Tapi, about two miles above Surat.

4. Commissariat-History of Gujarat, p. 264.

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very near to Rander, some of the Arab population of the latter may have migrated to that place for trade and other reasons. Turks and Afghans who came from northern India rarely showed aptitude for trade to any great extent.

In 1347.

Subsequent to the invasion of Muhammad Shahb-ud-din Ghori the next mention of Surat is in 1347 in connection with the rebellion of Gujarat during the reign of Muhammad Tughlak (1325-1351). On this occasion the Sultan, having advanced in person, defeated the rebels and sacked the towns of Cambay and Surat. Surat was subsequently given up for being plundered.[1] In 1373 the emperor Firoz Tughlak (1351-1388) is said to have built a fort at Surat to protect the town against the Bhils.[2] Again, towards the end of the fourteenth century (1391), Zufar Khan when sent to manage Gujarat is said to have chosen his Son Maste Khan to be governor of Rander and Surat. But, it is added, Surat was not then well populated.[3] During the fifteenth century Muzaffar Shah was the governor of Surat. His son also named Masti Khan joined the rebellion against Sultan Ahmed Shah I who came to the throne in 1411. The rebellion however was suppressed and Masti Khan submitted.[4]

Story of Gopi, 1496-1521.

So far the notices of Surat are unsatisfactory. That it was the site of an old town is possible. But that it was a place of little consequence seems certain. The local histories are agreed in fixing the establishment of its prosperity as a modern city to the last years of the fifteenth century. About this time (1496-1521) a rich Hindu trader settled in Surat. His caste is disputed, some acccounts making him out to be a Nagar Branman, others an Anavla Brahman. But his name is known to have been Gopi. This man induced other merchants to settle at Surat, and built a large house and a garden. He founded one of the quarters of the town called, in his honour, the Gopi ward, or Gopipura, and enlarged (1516) a pond, lining it with stone and making it the chief ornament of the city.[5] In reward for the improvement at Surat, the king of Gujarat honoured Gopi with the title of Malik; and his wife, known as the Rani, founded a second ward, the Ranichakla, and built a reservoir, still known as the Rani talav. So far, runs the story. Gopi's town had no name.

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1. Briggs' Ferishta, I., 437 This sack of Surat is not, however, mentioned in the Tarikh-i-Firoz Shahi.- Elliot's India, III, 254-265.

2. Munshi Abdul Hakim's History.

3. Bakshi Mia's History.

4. History of Gujarat (Gazetteer series, old) page 235.

5. This is the Gopi talav, near Daman Gate, now only a hollow used as a garden. It was in the seventeenth century, according to Della Valle's account, a very large tank, with a diameter of about two furlongs and contrived with many sides and angles, at which there were stairs leading down to the surface of water Such reservoirs were commonly constructed by rulers or wealthy persons for the public benefit. Dr. Fryer writing about 1674-75 refers to it as already having gone dry. (Commissariat : History of Gujarat, Vol. II, pp. 329, 379).

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and was simply spoken of as the 'new place.' Gopi, consulting with the astrologers fixed on the name Suraj, of Suryapur. He approached the king of Gujarat for leave to have the town called by this name. But the king, perhaps not altogether liking that a new town in his dominions should bear a purely Hindu name, by slightly changing the word to make it agree with the heading of the chapters of the Koran, called it Surat.[1] Portuguese chronicles describe Malik Gopi as the governor of Surat and Broach under Sultan Muzaffar II. We gather from Portuguese historians that he befriended the Portuguese at the Gujarat court. Their deputation which was sent by Afanso De Albuquerque passed through Surat in 1514 and waited upon the Sultan where Gopi was of some help to them. The Portuguese wanted a site at Div for building a fort there. The mission proved a failure. Subsequently according to Mirat-i-Shinkandari. Malik Gopi incurred the displeasure of the Sultan and was put to death by about 1515.[2]

Account of Surat, 1514.

The naming of the city referred to above is said to have taken place about 1520[3]. But, if the story is true, the name must have been chosen some years before, as in 1514, when the Portuguese traveller Barbosa was in Gujarat, Surat was under that name a place of importance. He describes it as city of a very great trade in all classes of merchandize, a very important seaport, yielding a very large revenue to the king, and frequented by many

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1. The accounts differ slightly as to this Gopi's date. Some day he flourished under Mahmud Begara (1459-1511): others under Mahmud's Son, Muzaffar II (1511-1526). Of Gopi and the origin of his wealth several stories are told. One runs that Gopi, the son of a Brahman widow, had studied Persian and anxious for employment went with his mother to Delhi. For some days he attended at the government offices offering his services, but without success. Once determined to let no slip, Gopi spent all his time near the chief office. One day, after the regular clerks had left, an important Persian letter came. The governor called for his reader, but the reader was gone. One of the officers thought of Gopi, who was sleeping near, and called him in. The governor was spelling over the letter to himself, holding it up to the light. When he had done, he handed it over to Gopi to read. Before taking the letter boy said he had read it, and told the governor what was in it. The paper was thin, and as the governor was reading the letter Gopi had made out its contents from the other side. The governor was delighted with the boy's cleverness, and Gopi's fortune was made. Other stories seek to explain why Gopi asked to have his town named Suraj. The mistress of a rich merchant of Rander quarrelled with her lord and determined to go on a pilgrimage to Mecca. Stopping for some time at a fishing village on the Tapi, a mile or so below Rander, she employed a Brahman widow as a servant. Finding this woman faithful, the lady, on starting for Mecca, left all her jewels in the widow's keeping. On her return the widow restored the jewels. But the lady, won from her former life of pleasure, gave all her fortune to the widow and her son, asking only that, in return, something might be done to commemorate her name. The lady's name was Suraj, and it was for this reason that Gopi was anxious that the new town should be known as Surajpur. Another story tells that a lady named Surata, deserting the seraglio of the emperor of Constantinople, was befriended by a great merchant of that city. Escaping together to Gujarat, the merchant was struck with the site of a fishing village near Rander. Here he settled and, succeeding in trade, raised the village into a town and called it by his lady's name.

2. Commissariat : History of Gujarat pages 276-77, 301-03

3. See Narmadashankar's Gujarati account of Surat.

ships from Malabar and all other ports." [1]

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Thrice burnt by the Portuguese, 1512-1531.

In 1512, shortly before Barbosa was in Gujarat, Surat is said to have been burnt by the Portuguese[2]. In consequence of this attack the merchants complained to the king, and he ordered a fort to be built[3]. But, in spite of this protection, before many years passed, Surat suffered from a wholly unprovoked and piratical raid, in 1530, a second time by the Portuguese under the leadership of Antonio da Silveira. The assailants were opposed by a guard of 300 horse and 10,000 foot, but at the first charge the defenders fled, and the town, a 'place of 10,000 inhabitants, mostly Banias and handicraftsmen of no courage[4], was taken and burnt. In the following year, as they were still at war with the Gujarat King, the Portuguese again burnt Surat. The heavy hand of the Portugueses fell equally upon another port near Surat namely Rander (which had been at one time even more prosperous than Surat). Much of the traffic of that devastated port came to be transferred to Surat, with the result that the city slowly recovered from Portuguese destruction[5].

Fort built, 1540-1546.

Annoyed by the destruction of Surat, the Ahmedabad king gave orders for the building of a stronger castle. The work was entrusted to Safi Agha, a Turk who had been ennobled with the title of Khudawand Khan, and in spite of the efforts of the Portuguese, who, both by force and by bribery, are said to have tried to prevent its construction, the castle was finished about 1546[6]. Farishta praises Khudawand Khan's fortress, calling it strong and well constructed. On the two landward sides was

1. Barbosa (1501-1517), Stanley's Ed., 67. There is some confusion in Barbosa's notice of Surat. He describes it as at the mouth of a river twenty leagues south of the river of Ravel. Ravel is apparently Rander, and the mistake perhaps arose from supposing that Rander was on the Narmada. Barbosa was in Gujarat shortly after the death of Mahmud Begara (1513).

2. This plunder by the Portuguese is on the authority of Lafitou, in his Conquests des Portugais quoted in the Cal. Rev., IX., 108, and Milburn's Or. Com., I., 303.

3. Narmadashankar. A casual mention of a castle at Surat in 1527 confirms the building of this first fort. (Bird's Gujarat, 235). Narmadashankar also mentions an older fort used by the merchants of Rander as a place of confinement for pirates

4. Faria, In Kerr., VI., 220.

5. Dr. Balkrishna, Commercial Relations between India and England, p. 162.

6. Brigg's Ferishta, IV, 147. About the exact date there is some uncertainty. Bird mentions both 1540 and 1530 as dates of the building of the castle (244). The author of the Mirat-i-Ahmadi (1748-1762) gives the following account of the building of Surat fort ; They say that in the time of the Gujarat kings of Ahmedabad the port and population were in the town of Rander. This continued until 1540 (947 H.) when Safar Aka, a Turk or Rumi, who in the reign of Mahmud Begara (1459-1511) received the title of Khudawand Khan, built a fort of great strength. This he did to put a stop to the incursions of the Portuguese, who coming there, in boats, committed all kinds of injury and gave much annoyance to the inhabitants. To prevent its construction, the Portuguese came with several vessels armed with cannon. But they could not prevail. The fort was built with walls of 15 cubits broad and 20 cubits high, of much strength, and was armed with great cannon, like huge serpents, and all necessary munitions of war. A commander was appointed, and the attacks of the Portuguese were stopped.—Extract by Major Watson.

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a ditch sixty feet wide and the curtain, sixty feet high, had a rampart thirty-five yards wide. The whole of the masonry was connected by bars of iron or lead. After the tower was completed the city quickly increased in size ; and Ferishta specially mentions one beautiful building, four storeys high, said by the Europeans to be like a Portuguese palace[1].

Disturbances at Surat, 1559-60.

About the year 1559 the people of Surat suffering from oppression at the hands of Rajab[2], who was also given the title Khudawand Khan after the death of his father, asked Imad-ul-Mulk Arslan, who was an officer at Broach and to whom Surat was at that time assigned to remove their governor from Surat. As Khudawand refused to resign, Imad-ul-Mulk advanced against him, and on his reaching Surat, Khudawand Khan agreed to submit. But he planned treachery and inviting Imad-ul-Mulk to an entertainment, had him assassinated. Changiz Khan, Imad-ul-Mulk's son, marched against Surat to avenge his father's death. Khudawand Khan, apprehending the danger called for the assistance of the Portuguese on promise of granting Surat to them for their help. After the battle in which Portuguese defeated Changiz Khan, Khudawand Khan changed his mind. He backed out of the bargain and tried to run away but accidently fell into the hands of Changiz Khan, who slew him[3]

In 1572 Surat fell into the hands of the Mirzas, then in rebellion against the emperor Akbar. The Mirzas strengthened the fort and prepared for resistance. In the beginning of 1573 (January 11th[4]) Akbar marched on Surat and after a vigorous siege, which lasted for about six weeks (11th June, 26th February), the fort surrendered[5]. During the progress of the siege the Mirzas wrote to the Portuguese offering to surrender the castle to them as the price of their assistance. The Portuguese accordingly

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1 Briggs' Ferishta, IV, 147. Khudawand is said to have submitted three plans to the king. The king chose the one that placed the castle on the bank of the river, and under this plan wrote *muburak*, or 'the prosperous'. Hence the city up to this day is called Surat-bandar mubarak. Bakshi Mia's History

2. Rajab was the brother of Imad-ul-Mulk Arslan

3. Commissariat : History of Gujarat, Vol. Ipp, 467-468

4. According to their own account, the Portuguese came to Surat as allies of Khudawand. But finding that, contrary to his promise, he showed no signs of giving up the castle, they abandoned his cause. (Faria, in Kerr VI, 414). This Khudawand Khan is also called Ikhtiar Khan. He is not the Safar Aka Khan of Khudawand Khan who built the Surat fort. Safar, the builder, called Khojah Zofar by Faria, commanded the Gujarat troops at the second siege of Diu (March 1545). According to Faria (in Kerr, VI, 392) Zofar was killed not long after the siege began. If this is correct, there must have been a third Khudawand Khan, who, in 1554, was one of the victims of the assasin Burhar. Bird's History, 271. It may be added that Khwaja Safar (Zofar) was killed on 24-6-1546 and was buried at Surat, where his memory is still preserved by a fine mausoleum built in the Indo-Sarcenic style of Ahmedabad. In the same mausoleum lies buried Mirjan Shami who led the career of an adventurer carrying holy war against the Portuguese and who was killed in 1560. Commissariat : History of Gujarat, 471.

5. Bird's History, 322. On entering the fort, Akbar found a beautiful cannon which had come to Surat in the Turkish fleet that was wrecked on the Gujarat coast in the stormy season of 1554. (Sidhi Ali, in Bom. Lit. Soc Trans. II, 10). This

sent an armed force up the Tapi. But on reaching Surat and seeing the strength of the besieging army, they gave up all thought of fighting, and assuming the name of ambassadors, paid their respects to the emperor and came to terms with him. It appears that Akbar on his part being anxious to maintain friendly relations with the Portuguese who were a great power at sea, wanted to ensure safe passage for the pilgrims going to Mecca and therefore had already sent his ambassadar to the Portuguese viceroy.[1]

At the time of its conquest by Akbar, the district, or *sarkar*, of which the port of Surat was the headquarters, contained 993 towns or villages. Including the receipts from port dues and from a provision tax, this territory was estimated to yield a yearly revenue of Rs. 4,00,000[2].

Moghuls

From the year 1573, when Akbar conquered Surat, to 1733 when, in the decay of the Moghul empire its governor began to act as an independent ruler, Surat was administered by officers appointed by the court of Delhi. 1573-1733.

This period of 160 years may be divided into three sections : the first, of about eighty-five years (1573-1658) when under the emperors Akbar, Jahangir, and Shah Jahan, Surat enjoyed peace and rose to be one of the first cities in India : the second, the forty-nine years of Aurangzeb's reign (1658-1707), when Surat's prosperity was checked (i) by Maratha raids (1664-1685), and (ii) by the growing importance of Bombay (1677-1707) ; and the third, about twenty-seven years of increasing disorders, when the Surat governors were subject to the court of Delhi only nominally.

On the capture of Surat, Akbar (1573 March) appointed Kalij Khan commander of the fort. In the same year (April) Muhammad Husain Mirza marched from Daulatabad and besieged Surat. Kalij Khan was prepared for defence, and the Mirza finding the siege made no progress, abandoned Surat and went on to Broach. Surat attacked, 1573.

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gun, called Suliman, in honour of the Turkish emperor Suliman I. (1520-1566), was of so exquisite a model that Akbar ordered it to be taken to Agra. But as there were no means at hand for transporting it, the gun was allowed to remain at Surat. Bird's History, 322. According to Vincent Smith, Surat capitulated to Akbar on 26th February, 1573 The garrison of the fort was pardoned but the Commander Hamzaban had his tongue cut off for having used some improper language against the Emperer during the progress of the siege—Abul Fazal Op. cit ; III 25-26, 30-40.

1. Commissariat : History of Gujarat Vol. I, pp. 515-516, also Akbar by Smith p. 113.

2. Bird's History, 119. (5,00,000 *changizis*).

3. Bird, 324.

4. Bird, 324.

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Ever since 1573 A.D. in which year the Portuguese concluded a treaty with Emperor Akbar, they had regarded themselves as undisputed masters of the Surat coast and the gulf of Cambay. The Moghul governor of Surat however never missed an opportunity to deal squarely with them, with tact support from the Emperor. About the year 1580, a fleet of the Portuguese commanded by Diogo Lopes Coutinho was lying in the Tapi near Surat. A party of young men landed in the Moghul territory. They were attacked and nine of them were taken prisoners. They were brought to Surat and executed because they refused to apostatise. The governor sent the heads of the victims to the capital. Akbar knew the affair, but pretended that he had not seen the heads Kutubuddin Khan assembled, under imperial orders, an army of 15,000 in 1581 and ravaged Daman territory. The siege of Daman was pressed by the Moghuls but the Portuguese viceroy succeeded in warding it off with great skill[1] although he suffered heavily in the struggle. The fathers referred this matter to Akbar who denied having any knowledge of the incident, expressed his sorrow, but refused to ep?mand the governor. The Fathers who were under orders to return to Portugual found that they could not press the matter

It was in the course of Akbar's talks with the Portuguese missionaries that an embassy consisting of Sayyid Muzaffar and others was proposed to be sent to Europe. Father Monserrate was to accompany them. They started from Delhi and arrived at Surat on 5th August, 1582. Two Christian young men had been executed the previous day by the fanatic authorities of the place. It appears that Sayyid Muzaffar somehow did not go. He remained concealed and ran to the Deccan.[2]

In 1583 the Portuguese attempted to seize Surat, when the ex-sultan of Gujarat, Muzaffar, escaping from captivity managed to raise an army of some 30,000 and recovered a large part of his former kingdom. In the confusion which ensued the Portuguese viceroy thought an opportunity possibly offered of laying hands on Surat at small cost." but his plans were frustrated by the sudden arrival of a Moghul army.[3]

Condition of Surat 1590.

In Akbar's time Surat is (1590) called an emporium,[4] or first class port. It was of sufficient consequence to induce Akbar to appoint two distinct officers for its administration. Of these,

1. Commissariat : History of Gujarat, Vol II, p. 37.

2. Smith's Akbar page 203.

3. Cambridge History of India, Vol. V, p 24.

4. Gladwin Ain-i-Akbari, II, 65. Rander, Gandevi, and Balsar are mentioned as ports subordinate to Surat. Abul Fazal also speaks of the very fine fruits of Surat, especially its pine-apples. Its freedom from any share in Muzfar's rebellion (1583-1591) increased the propsperity of Surat. Had Muzafir succeeded in making his way to Surat, he would have found the Portuguese ready to help him. In 1589 the viceroy of Goa received orders from Europe to take advantage of the disturbances and seize Surat—Arch. Port.—Orient. Fas., 3,201.

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one was a military officer who, with the title of Quilledar, commanded the castle and river; the other, a civil officer who, with the title of Mutasaddi, or revenue writer, administered the district of Surat as a governor, and had charge of the city and the collection of the customs revenue. The Mutasaddi was not subordinate to the chief civil officer, the *Diwan* at Ahmedabad, but held his post direct from the Delhi court. Along with some other parts of Gujarat the lands of Surat were, about the year 1576, surveyed by Raja Todarmal. The whole area of the district, as given in the Ain-i-Akbari, is 770, 985 acres (1,312,315 *Bighas*) and the yearly revenue £ 47,588[1]. It furnished 2,000 cavalry and 5,500 infantry. In the reign of Jehangir, Surat acquired the distinction of being made the seat of a royal mint.[2]

The English in Surat, 1608-1609.

The events of most importance in the history of Surat at the beginning of the seventeenth century are connected with the arrival and settlement of certain companies of European merchants. For some time, the Portuguese had remained as stated above undisputed masters of the Surat seas. The first sign of opposition to their power was in August 1608, when an English ship arrived at the mouth of the Tapi.[3] As the commander, Captain Hawkins, came provided with letters from the English King to the Emperor Jehangir, he was allowed by Mukarab Khan, the governor of Surat, to bring into the city his merchandize, lead, iron and some treasure. Though his ship sailed from Surat in October, Hawkins remained behind; and in February 1509 started for Agra, leaving in Surat an English merchant and some English servants to sell the rest of his goods. In September 1609, a second English ship the 'Ascension' by name arrived in Gujarat waters but was wrecked off the Surat Coast. Her crew landed at Gandevi[4], and about seventy of them came to Surat. The Portuguese used their influence with the governor to prevent the English from being allowed to settle in the city of Surat and in consequence the shipwrecked crew were ordered to remain at the village of Umra, about three miles west of the city[4]. At the end of September they left Surat, most of them with their captain, or general as he was then called for Agra.

The city plundered 1610.

In December (1609) Surat was thrown into a panic by the approach of Bahadur* the son of Muzafar, the last of the

1. The amount given in the Ain-i-Akbari (Gladwin, II., 241-242) is 1,90,35,17 *dams* that is, Rs. 4,75,879.

2. Commissariat : History of Gujarat, Vol. II, p. 5

3. During this time, 1537-1608, Portuguese power in eastern waters had sustained two severe blows : (i) in 1580, by the absorption of the kingdom of Portugal in the Spanish empire ; (ii) in 1595, by the arrival of Dutch, the scourge of the pride and insolence of the Portuguese in the east.

4. Gandevi, about 30 miles south-east of Surat, at that time a port and manufacturing town of some consequence. Coverte, in his account of this voyage, speaks of it as a city of which a great man was governor.—Kerr., VIII., 331.

* Finch (1609) in Kerr, VIII., 274.

Commissariat : History of Gujarat, Vol. II, p. 45.

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Musalman kings of Ahmedabad, who was at that time attempting to recover Gujarat from the Moghuls. But by the timely arrival of strong succour from the Moghul viceroy of Ahmedabad, Bahadur was forced to withdraw without causing any damage. Finch, the English merchant whom Hawkins left in Surat, was (1610, January 18th) called to Agra by his superior and the English factory in Surat was closed[1]. In this same year Malik Ambar, a noble of Nizam Shah's court and governor of Daulatabad, invaded Gujarat at the head of 50,000 horse and carried on plunder in the districts of Surat and Baroda.

English in Surat 1608-1618.

At the close of the stormy season of the following year (1611 September 26th), three English ships came to anchor at the mouth of the Tapi[2]. A Portuguese fleet occupied the coast and the entrance of the river, so that the English ships were forced to remain outside. The governor of Surat, Khojah Nasar, and his brother Mukarab Khan, the governor of Cambay, professed to be anxious to trade with the English. But as nothing could be done so long as the Portuguese held the mouth of the river, they advised Sir Henry Middleton, the English Admiral, to move his ships to the port of Ghogo. Middleton refused to leave Surat, and detained some Indian craft, then lying near him, till he should receive on board all the English crew from Cambay and Surat. He then passed over the bar and anchored in Suwali road[3]. In October and November the English and Portuguese fought one or two petty skirmishes on the shore but no engagement of consequence took place either by sea or by land. The governor occasionally came to the shore and had some small trade dealings with the English. In December, 1611 Mukarab Khan was deposed from the management of Cambay, and Khojah Nasar from that of Surat. The new governor, like his predecessor, entered into some trifling transactions with the English. But the change of governors would not seem to have materially affected the position of the English at Surat. In the beginning of the next year (1612, January 26th), the English who had come from Cambay went on board one of the English ships, but Sir H. Middleton waited for a few days hoping still to obtain leave to establish a factory at Surat. Mukarab Khan, who was then the commissioner of customs or *shah-bandar* refused to have any further dealings with the English, and blaming them for causing much loss to the revenues of the port, ordered them to leave at once. The fleet accordingly set sail on the 13th January (1612)[4]

1. Finch in Kerr, VIII, 275.

2. These ships were the 'Trades Increase' 1,000 tons the 'Pepper Corn', 250 tons ; and the 'Darling', 90 tons.—Sir H. Middleton, in Kerr, VIII, 361.

3. Kerr, VIII, 401. Suwali road was a little way north of the mouth of the Tapi.

4. Sir H. Middleton, in Kerr, VIII., 402. Among the English who were taken off by Sir H. Middleton were Captain Hawkins and the wife he had married at Agra ; Captain Sharpey, of the 'Ascension' ; and a carpenter of the 'Ascension', Bangham by name, who when the rest of the crew went to Agra, would seem to have stayed in Surat and built a ship in English fashion—See Middleton, in Kerr, VIII, 393, and Fryer (1675).

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Establish a factory 1612.

In September (5th) 1612, two English ships, the 'Dragon' and 'Osiander', under the command of Captain Best, arrived at the mouth of the Tapi. One of the merchants sent to Surat was welcomed by the governor and was allowed to trade[1]. On the 13th September a Portuguese fleet of sixteen small vessels[2] entered the Tapi and captured some of the crew of one of the English ships. In retalisation the English commander, Captain Best, seized a Gujarat ship, refusing to give it up till the English were allowed to established a factory at Surat. About the same time news reached Gujarat of the great pressure exercised by the English against Indian ships in the Red Sea.[3] Accordingly, on the 17th October, the viceroy of Gujarat came from Ahmedabad to Suwali to treat with the English captain. Articles were drawn up for the settlement of English trade in Surat, Cambay, Ahmedabad, Gogo, and any other part of the Moghul dominions[4].

Fight the Portuguese, 1612.

On the 28th November a Portuguese fleet of four large ships and forty small barks appeared off the mouth of the Tapi, and on the following day (29th) the English and Portuguese vessels engaged each other. The fight was renewed more fiercely on the 30th. But next day the Portuguese held aloof. The English then put out to sea and for some weeks (December 1–22) cruised about the western shore of the Cambay gulf. On the 22nd, when the English ships were at Mahuwa harbour,[5] the four Portuguese ships came towards them. Fighting began on the morning of the 23rd, and lasted till between ten and eleven, when the Portuguese retired. The engagement was renewed on the 24th, and on this occasion the Portuguese were decisively put to flight but the English were so exhausted that the pursuit could not be pressed. The Potuguese did not renew the attack and after three days (27th) the English triumphantly anchored at Suwali. The English thus came out of the struggle successful. This running fight of a single month broke the reputation which the Portuguese had won in India by the sea achievements of a hundred years.*

1. Best (1612), in Kerr, IX, 99. This governor was probably not Mukarab Khan, but his successor

2. These small vessels of war were by the English writers of this time called frigates, a term then apparently meaing much the same as pinnace.

3. The reference is to the measures taken, by Sir H. Middleton in the Red Sea (May 1612) when, he forced the captains of the Musalman ships to trade with him. (Kerr VIII, 466-491). In addition the ships from Diu and Surat were obliged to pay a heavy ransom before they were released (Cambridge History of India, Vol. V, P. 78). According to Purchas (quoted in Kerr, IX, 143), this strong action on Middleton's part procured the privileges granted to Captain Best, lest the Moghuls should have the sea shut up to them and all their trade stopt.'

4. The chief provisions were : (1) that the people of Surat were to be allowed to trade freely with the English ; (2) that English commodities should pay a duty of 3½ per cent ; and (3) that the factory should not be made responsible for the robberies of English pirates.—Best, in Kerr, IX, 101.

5. Mahuwa (Mhowa) near Gopnath Point (Opposite Surat) still a place of trade. In 1612 there were the ruins of a great town, but few inhabitants—Best, in Kerr, IX, 105.

* Hunter : History of Br. India Vol. I page 302-4.

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Obtain a charter, 1613.

In the beginning of 1613[1] a charter came from the emperor confirming the treaty between the English and the viceroy of Gujarat. The charter was sent down to Suwali on the 6th of January as a private letter. But the English captain refusing to take it in this form, on the 11th, the manager of the customs or *shahbandar* and several other leading officers went to Suwali and made a public and formal presentation of the charter. A permanent factory (i. e. a group of merchants living together) was now established at Surat under Thomas Aldworth, a merchant being also sent up to Agra, with presents, to watch over English interests at Court.[2] On the 17th the English ships sailed away. Towards the close of the year (1613) the Portuguese appeared off the mouth of the Tapi, and in retaliation for the favour shown to the English by the Moghul government, seized and carried off to Goa a great Gujarat ship returning from Red Sea.[3] Jehangir was very indignant at this affront and despatched a force against the Portuguese. Mukarab Khan was restored to the office of governor of Cambay, and two armies were equipped, one to act against Daman, and the other to attack Diu.[4] No English ships came to the Tapi in this year (1613).[5]

English in Surat, 1608-1618.

In 1614 (October 15th) four English ships arrived at Suwali. The commissioner of customs, Khojah Nasar, went to Suwali to try and induce Captain Downton, the English Admiral, to join with the Moghuls in attacking the Portuguese.[6] But as Captain Downton refused to act against the Portuguese, the governor ordered that no one from Surat was to trade with the English. The governor was severe against the English because he feared there was a secret alliance between them and the Portuguese. But when he found that this was not the case, he allowed the landing of the English ships to be carried on.[7] In December 1614, the Portuguese caused a great loss to Surat by burning in Gogo the large pilgrim-ship, the 'Rahimi'.[8] While Captain Downton still refused to join the governor of Surat against the Portuguese, news came that a great fleet was sailing north from Goa to destroy the English. On the 17th of January

1. Best, in Kerr, IX 30. The dates differ from those given by Orme (Historical Fragments, 330) by about six weeks. Probably they have been altered by the Editor of Kerr's voyages to suit the 'new style.'

2. Cambridge History of India, Vol. V, p. 7

3. This ship is said (Orme's Hist. Frag. 334) to have had on board five hundred persons and a cargo valued at £ 100,000 sterling. Withington says seven hundred persons.- Kerr, IX, 126

4. Orme's Hist. Frag., 341. Mukarab Khan is said at this time to have received the title of *nawab*, and the government of Surat, Broach, Baroda and Sarnad (Orme's Hist. Frag., 343)

5. The 'Expedition' (Captain Newport) had started for Surat (January 7th 1613). But at the Cape of Good Hope, hearing from the 'Nestor' that the factory at Surat was closed, they went to Diul in Sind. Kerr, IX, 143

6. Downton (1614), in Kerr, IX, 173.

7. Downton, in Kerr, IX., 175.

8. The 'Rahimi' is said to have been 1,500 tons burden and to have been able to carry 1,500 pilgrims. Her measurements were length 153 feet, breadth 42 feet, and depth 31 feet.—Saris (1611) in Kerr, VIII., 487. This ship was the property of Jehangir's mother.

(1615)* first sixty small barks and then on the 18th nine ships, six of them very large, appeared off the Tapi. The Governor of Surat, thinking that the English stood no chance against so strong a force, tried to enter into terms with the Portuguese viceroy. But the viceroy, confident of victory, rejected his offer.

Defeats of the Portuguese, 1615

At this time the English ships were lying in the Suwali roads, separated from the open sea by a spit of sand about seven miles long. Early in the morning of the 20th January, Captain Downton arranged that one of his ships should drop down to the south end of the roads, and that the other three ships should also move in the same direction. The Portuguese, taking for granted that the English were planning an escape, though the tide was then low and their larger vessels could not pass the sand bank, sailed against the English ship nearest the mouth of the harbour. Three of their ships and many small barks reached the English vessel and made a furious attempt to board her. Seeing this the other English ships came down closer firing against the Portuguese who, failing in their attack on the English, while at the same time their own ships caught fire, were forced to take to the water and escape as they could. The three Portuguese ships were destroyed, floating ashore and burning there. But the English vessel, though much injured in its masts and rigging, was saved. The Portuguese viceroy now offered to accept the governor's proposal for peace. But he, seeing the valour of the English, refused and helped the English with timber and provisions. After their attack, on the 20th January, the Portuguese held off and the English continued to load their ships. Nothing more was done till the 3rd February, as the Portuguese viceroy was waiting for supplies. The supplies he wanted were materials for fire-ships. These he got ready and first on the 8th and again on the 10th, towing them in the desk of evening up the gulf, let them float down the passage towards the English ships. Both attempts failed, and the Portuguese viceroy retired to the roads south of the mouth of the Tapi. The Moghul governor who was all the while watching the progress of fighting, now threw himself heartily on the side of the English and after the battle was over there was a small ceremony of mutual congratulations held between the Moghul and the English Officers.* The English ships continued at Suwali completing their lading, leaving finally on the 3rd March.[1] One

*Hunter : History of Br. India Vol. I p. 326.

1. Before they sailed the governor of Surat paid Captain Downton a visit and went on board his ship. The day after leaving Suwali the English ships were followed by the Portuguese. But, after sailing in pursuit for a day, the Portuguese retired. Downton proceeded to Bantam, where, on the 6th August, he died, lamented, admired, and unequalled.' (Orme's Hist. Frag., 356) 'His disposition says Purchase, 'savoured of the true heroic piety and valour being in him seasoned by gravity and modesty." (Quoted in Kerr, IX., 196). The details of the English and Portuguese armaments engaged in this fight were as follows. The English four ships—Downton's ship, the 'New Year's Gift, 650 tons, the 'Hector' 500 tons; the Hope' 300 tons; and the 'Solomon', 200 tons (Kerr, IX., 167). The Portuguese had sixty small war boats, rowing eighteen oars aside, and each manned by twenty soldiers; two galleys, with fifty men each a pinnace of 120 tons, two ships of 200 tons each; and six great ships called galleons, one of 400 tons, one of 500 tons, two of 600 tons, one of 700 tons, and the viceroy's ship of 800 tons—See the Examination of Domingo Francisco (1615), in Kerr, IX., 207.

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of Downton's vessels, the '*Hope*' laiden chiefly with indigo and cotton goods sailed for England—the first vessel to be sent home from an Indian port.[1]

English in Surat, 1608-1618.

In 1618 Mukarab Khan who was for some time acting as the viceroy of Gujarat was recalled after his post was given to the emperor's third son, Prince Khurram* afterwards Shah Jahan (1626-1658). The prince chose his favourite Zulficar Khan to act as his manager at Surat. This officer, tracing to the English the war between the emperor and the Portuguese and the consequent loss of revenue at Surat, determined to oppose the English and make friends of the Portuguese. With this object he concluded a treaty with the Portuguese, one of the provisions of which was that the Moghuls and Portuguese should unite in driving the English and Dutch from their ports.[2] But before the treaty could be acted on, or even be confirmed by the emperor, another English fleet arrived off the Tapi. In this fleet came Sir Thomas Roe, an ambassador from the English king to the emperor.

Arrival of Sir Thomas Roe, 1615

Sir Thomas Roe reached Surat on the 26th September, 1615, and after remaining for about a month in the city started (October 30th) for Ajmir, where Jahangir then was. At Ajmir, Sir Thomas Roe was received with honour, and by his bearing gained the respect and good-will of the emperor. But there was at Court a strong party hostile to the English, some from distrust of foreigners and others from friendship with the Portuguese, so that the English ambassador's negotiations went on but slowly. In October, 1615, a large Portuguese fleet arrived near the Tapi. But as the governor Zulficar Khan was not in a position to act with them against the English, the Portuguese would seem to have contended themselves with escorting the trading vessels from Goa to Cambay.[3] In 1616 (September 24th) another English fleet came to Suwali and remained there till March 1617. In that month there was a dispute in the city, and a body of armed men came up from the English ships threatening to plunder the town. They, however, retired without doing any damage.[4] But in case of any similar attempt in the future, the governor gave orders to strengthen the fortifications of Surat.[5] In the meanwhile Roe's negotiations especially with Prince Khurram the Viceroy of Gujarat were fairly successful and he returned to Surat early in 1618 having obtained the grant of important

1. Cambridge History of India, Vol V, p 79.

* Commissariat : History of Gujarat, Vol. II, pp. 53-54

2. Faria quoted in Orme's His. Frag., 361.

3. Orme's Hist. Frag.369.

4. Roe, In Kerr, IX 337.

Roe, in Kerr, IX,. 338.

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privileges in favour of the English.[1] By the time Roe embarked for home (February 1619), there were regular English factories at Surat, Agra, Ahmedabad and Broach. All these were placed under the authority of the chief factor at Surat who was now styled the President, and who in addition controlled the trade which had been opened up with Red Sea ports and in Persia.[2]

Dutch in Surat, 1616.

Meanwhile another European nation had come to Surat anxious to trade.

The Dutch who were anxious to secure Gujarat cotton for the markets of the Moluccas intended to send their ships to Surat. In 1606 and 1607 a Dutch merchant had been at Surat but the fear of the Portuguese succeeding in setting the Moghul governor at Burhanpur against him, made him very nervous and he committed suicide. In 1615 the Dutch governor of Coromandel sent Gilles van Ravesteyn to Surat, where he arrived after a six week's journey on horseback. He went to Burhanpur in the company of Sir Thomas Roe. On his return he advised against the establishment of a factory. But even before his report had been received, Coen who was the director general of trade at Bantam, despatched a yatch under Pieter van den Broecke to Gujarat. He arrived at Surat in 1616 (August 2) and asked permission to establish a factory. Sir Thomas Roe did what he could to excite the Great Moghul suspicions against the new comers, but the Surat merchants feared that in case of a refusal the Dutch might attack their shipping and the governor of the town gave a provisional permission. The next year two senior merchants Van Ravesteyn and Adriaan Goeree were left in charge of the Surat factory and they had to struggle through some very difficult years. In 1617 two Dutch ships were wrecked at Gandevi near Surat and a few of the merchants were allowed to remain in Surat to dispose of their goods. Subsequently Van Ravesteyn succeeded, to the mortification of Sir Thomas Roe, in negotiating, not it is true, with Jahangir himself but with his son Prince Khurram a satisfactory treaty of commerce (1618). In 1620 another Dutch ship came bringing Van den Broecke who was now appointed to manage the affairs in Surat. The Dutch were now allowed to establish a factory like that of the English.[3]

1. The chief provisions were : (1) That the English should be well treated ; (2) that they should have free trade on payment of customs dues ; (3) that their presents to the emperor should not be subject to search at Surat ; (4) that the effects of any one who died should be handed over to Englishmen. (Roe, in Kerr, IX., 292). Roe whould seem also to have found it advisable to make a separate agreement with prince Khurram, in whose hands Surat then was. The chief articles of this agreement were : (1) that the governor of Surat should lend ships to the English ; (2) that resident English merchants might wear arms ; (3) that the English might be allowed to build a house in Surat ; (4) that they should have free exercise of their religion ; and (5) that they should be allowed to settle their disputes among themselves.—Kerr, IX., 253.

2. Cambridge History of India— Vol. V p. 81

3. The Dutch were at the Moghul court, 1618, (Jan. 13). But Roe does not mention how their mission succeeded. (Kerr, IX., 364) Of the ships lost at Gandevi (September 1617), one was a vessel of 1,000 tons, the other s a small pinnace.—Pring, in Kerr, IX., 453.

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In 1622, however, there was a dangerous conflict with the Gujarat authorities, especially with Asaf Khan, Prince Khurram's powerful father-in-law, over the activities of a Dutch ship which had sailed along the Arabian and Persian coast and had confiscated property belonging, or so it was alleged, to that dignitary. Thereupon, the factor at Cambay who was within the reach of Asaf Khan's resentment was arrested and sent to Agra. Van den Broecke had to pay an indemnity before the Cambay factory could be recovered. Incidents like these which were typical of the trade of those times, did not prevent the Gujarat factories from making larger and larger profits. Indigo and textiles became important articles of export. In 1624 the first ship sailed from Surat direct for Holland carrying indigo and the Dutch commercial centre at Surat soon came to be the most profitable of all the establishments the Dutch company possessed.[1]

Aspect of Surat. 1608-1620.

In 1608, when the English began to trade with Surat, the city is described as 'of considerable size, with many good houses belonging to merchants.' On the bank of the river were two chief buildings, the castle moderately large, strong, well walled, surrounded with a ditch, and having a small postern opening towards the river. Many cannons, some of them of vast size, were on its ramparts.

Further up the river was the custom house, from which a flight of steps ran down to the water. Behind the custom house was the market-place, divided into two parts, one for goods, the other for horses, and cattle : and towards the right, behind the castle, an open space or *maidan*, 'a pleasant green, having a maypole in the middle, on which at high festivals was hung a light and other decorations.'[2] From the top of the castle, though the town was of considerable size, with many good houses most closely set, so numerous and thick were the trees that it seemed, a wood or thicket.[3] In front of the castle the city was open, but was fenced on all other sides by a ditch and thick hedges. In the hedge were three gates, one leading north to Wariav, one east to Burhanpur, and one south to Navsari. To the south, beyond the Navsari gate was the great reservoir called Gopi's pond, three-quarters of an English mile in circuit, and beyond the lake some fine tombs, with a fine paved court. Near the tombs was a small mango groove 'where the citizens resorted to banquet.' and about a mile (½ kos) further was a great tree much venerated by the Banias[4]. Near the city were "goodly gardens abounding in pomegranates, pomicitrons, lemons, melons, and figs, to be had at all times of the year, the gardens being continually refreshed with curious springs and fountains of fresh water.'[5]

1 Cambridge History of India, Vol. V, p. 40.
2. Finch (1610) in Kerr, VI., 275.
3. Terry (1618), In Kerr, IX., 391.
4. Finch, in Kerr, VIII, 276.
5. Copland (1612), in Kerr, IX., 119.

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Course of trade 1608-1620.

The city was very populous and full of merchants[1]. The people were 'tall, neat, and well clothed in garments of white calico and silk, and very grave and judicious in their behaviour[2]. Goods were brought up the river in boats. The boats were moored at a flight of steps that ran down to the water's edge near the castle. Their cargoes were taken up the steps and laid in the custom-house, where were store-rooms for storing goods till they were cleared. After passing through the custom-house, merchandise was carried into the market-place on one side of the castle green, and there offered for sale[3].

Custom rates.

Custom dues at that time are said to have been levied at the rate of 2-½ per cent for goods, 3 per cent for provisions, and 2 per cent for money[4]; but the authorised scale of custom duties counted for little, compared with the payments which would have to be made in one form or another to secure the favour of the officers on the spot.[5]

From Akbar to Aurangzeb 1608-1658.

The fifty years between the settlement of the English and Dutch in Surat, and the close of the reign of the emperor Shah Jahan (1608-1658) was a time of increasing prosperity at Surat. During these years few events of any great importance to Surat are recorded. In the reign of Jahangir, Surat for a time was controlled by the partisans of rebellious Shah Jahan but the Imperial forces under Bahadur Khan quickly recovered it from him in 1623.[6] In the previous year the traders complained to the governor that some of their ships had been seized by European pirates. The governor suspected the English and placed them in confinement. But, after a few months, finding they were not to blame, he set them at liberty[7]. On the death of Jahangir in 1627 Prince Shah Jahan, while on his way to the north came

1. 'At this time (1614) an addition was made to the population of Surat by the arrival of many hundred Banias and other who, sent away from the Portuguese towns, then under siege by the Deccanis, sought refuge in Surat and Cambay.'—Withington, in Kerr, IX, 126

2. Finch, in Harris' Voyages, I, 84, and Copland as

3. Finch, in Kerr, VIII., 276. At this time the two great branches of Surat foreign trade were westwards with Mocha in the Red Sea, and eastwards with Acheen in Sumatra. Of the Mocha trade, Terry (1614-1620) says, this is the chief market for Surat goods, cotton cloth, and cotton wool. To buy these, merchants come to Mocha from many part of Turks' dominions, from Abyssinia (Prester John's country), and from grand Cairo in Egypt. (Terry's voyages, 130). Of the trade to the east mention is made (1599) that in Acheen a quarter of the city was set apart for Gujaratis (Captain John Davis, in Kerr, VIII., 52). Gujaratis were (1603) found in Java (Scott in Kerr, VIII, 147), and in 1611, as far south as the island of Banda (s. lat 5), Captain Sairs, in his voyage to Japan, noticed that Gujarat (Cambay) cloth, black and red calicoes, and calico lawns, were in request. (Kerr, VIII., 188). Their competition with the old Gujarat carrying trade to the eastern archipelago was one of the reasons why the English found themselves so much disliked in Surat. See Hawkins (1608), in Kerr, VIII, 223

4. Finch, as above.

5. Moreland's India at the Death of Akbar, p. 48.

6. Commissariat : History of Gujarat, Vol. II, p. 92.

7. De la Valle and Bruce's Annals, I, 236.

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within seven miles of Surat. His agents took possession of the city and demanded and secured a forced loan from the towns-people. The English paid 5,000 rials[1] while several of the merchants borrowed from the company, 7,000 more in order to lend the amount to the Prince[2]. In 1629 (April. 6) the Emperor sent an order, or *farman*, to the English at Surat to act against the Portuguese. Accordingly, when the Portuguese fleet arrived of the Tapi, it was attacked by them. At this time the English and Portuguese were not only engaged at sea, but sending bands of men ashore, they fought on the sand hills. In these skirmishes the Portuguese suffered severely[3]. The year 1631 was a time of famine and pestilence in Surat[4]. A few years later (1636) Surat ships were again attacked and injured at sea by Europeans. On hearing complaints of this, the governor imprisoned the different European factors and only released them on the payment of £ 17,000[5]. In 1642 the French came with a great show of wealth and established a factory at Surat[6]. In 1664 the Dutch and the English were at war. At this time the Dutch were very strong in Surat. Enraged at some act of the governor, they seized the great Musalman pilgrim-ship and refused to give her up. Complaints of this reached the emperor, and the governor was compelled to restore the Dutch a sum of Rs 50,000.[7] In 1652 the governor of Surat was favourable to the English, and the next year, when a Dutch fleet appeared off the Tapi, they refrained from attacking the English through fear of enraging the Moghul. During the struggles between the sons of the emperor Shah Jahan by which *Hindustan* was disturbed in 1657, one of the competitors Prince Murad seized the fort of Surat and pillaged a great part of the town[8].

Administration of the city, 1608-1658

Throughout this period the form of administration of Surat remained unchanged. There were still the two governors, the

1. Rial of eight was equivalent to 6 s. at this period which means 5,000 rials equal £1,500.

2. Commissariat : History of Gujarat, Vol. II, p. 106.

3. Bruce's Annals, I., 301.

4. The condition of the city has been thus described by a Duteth factor who had been in Surat at the end of 1631 : "When we came in to the city of Surat there is so great stench of dead persons that the sound people that came into the town were with the smell infected , and at the corner of the streets the dead lay to twenty together, one upon the other, nobody burying them." (Commissariat : History of Gujarat, Vol. II, p. 317).

5. Bruce's Annals, I., 341.

6. Macherson's European Commerce with India, 259.

7. Baldaeus (1660-1680), in Churchill, III., 512.

8. Jadunath Sarkar History of Aurangzib Vol I, pp 296-98. Industry was paralyzed and trade at a stand-still. "It does not a little trouble us," wrote one of the Company's chief servants, "to pay nine per cent interest for what money we shall be forced to take up for your account towards providing of goods for the next year, and at that a rate little to be had, every one rather burying their money than adventuring to trust it out in this time of war." Surat Despatches for 1658-1659, quoted in Kaye's Administration of the E. I. Co., 38.

civil ruler of the city and district and the military commander of the castle. The list given below shows that in the thirty-two years ending with 1658 the office of city governor changed hands as often as eleven times.[1]

The city governor, as has already been pointed out, was appointed directly by the Emperor and was in no way responsible to the provincial viceroy. Here he used to live in great pomp and usually moved about, accompanied by soldiers, well caparisoned elephants, huge trumpets and thundering kettle drums[2].

Trade arrangements.

As compared with the accounts given by the early travellers, the rate of customs charged on Europeans would seem to have been raised. In 1638 all goods belonging to Europeans are said to have paid three and a half per cent on imports and exports alike, except gold and silver, coined and in bars, which when imported paid only two per cent[3]. With the increase of wealth the appearance of the city improved. One addition of some importance was the building, in 1644, of the travellers' resting-house, now used as a municipal hall and offices. The town is also described as enclosed on the landward side by a mud wall, which is not noticed in the earlier accounts.[4] In 1623 Surat is described as 'moderately large, and for India well built'[5]. Later on, the town is said to be adorned with 'many fair houses built with flat roofs'[6]. As regards the population of Surat at this time, of Indians there were Hindus, Muhammadans, and Parsis ; the Muhammadans the fewest, and the Wanias the richest. Of foreigners, there were, besides the few European merchants, Turks and Jews, and traders of Arabia, Persia and Armenia[7]. Servants and slaves were so numerous and so cheap that 'every body, even of mean fortune, keeps a great family and is splendidly

1 The following is a list of the city governor of Surat between 1628-1657 .

(1)	Mir Arab ..	1628
(2)	Moiz-ul-Mulk	1630
(3)	Jam Kuli ..	1635
(4)	Muhammad Khan	1639
(5)	Mowazaz Khan	1644
(6)	Mowazaz Khan .	1645
(7)	Mazi Uz-Zaman .	1648
(8)	Jam Kuli (2nd time) ..	1651
(9)	Mustafa Khan ..	1653
(10)	Muhammad Sadek ..	1655
(11)	Roshan Zamir ..	1657

2. Commissariat : History of Gujarat, Vol. II, p. 377.

3. Mandelslo's Travels (1638), French Ed., 59. There seems to have been a special customs duty at the rate of one in 40, or 2½ per cent, on Musalmans, and two in 40 or 5 per cent on Hindus. The 2½ per cent levied on Musalmans was the *zakat*, or charitable contribution paid by the faithful.

4. Mandelslo (1638) mentions a good stone rampier on the land side (Harris, II., 120).

5. De la Valle (1623), I, 25

6. Ogilby's (1660-1685) Atlas, V., 211. Ogilby quoted from travellers up to about 1650.

7. Dela Valle, I., 25, and Ogilby's Atlas, V., 211.

attended[1]. Though the city was (1623) full of inhabitants, the number of people varied greatly at different seasons of the year. During the rainy reason (June-October) many of the people were absent from the city. But in the busy months, January, February and March, so crowded was Surat, that lodgings could scarcely be found either in the city or in the suburbs[2]. The country people would seem to have been less prosperous than the townsmen. "Much of the land lies fallow," says Mandelslo (1638)[3], "and this because from one-third to one-half of the crop is taken by the governor, so that few think it worth their while to cultivate the fields at so excessive a rate."

Trade 1608-1658.

Surat was already 'one of the most eminent cities for trade in all India.'[4] By land, caravans went and came by the Tapi valley south-east to Golconda ; east to Burhanpur in Berar, and from that on to Agra ; and north through Ahmedabad to Agra, Delhi and Lahore. By sea, ships came from the Konkan and Malabar coasts and from the west, besides the great trade with Europe, from the ports of eastern Africa, Arabia and the Persian Gulf ; south they came from Ceylon ; east from the Madras and Bengal coasts, from Pegu and Malacca, but above all, from Acheen in Sumatra. By land, merchandize came and went to Surat during the fair weather months in caravans of wagons, camels and bullocks ; and by sea, the larger ships, anchoring in the Suwali roads, unladed there and sent the goods twelve miles by land in bullocks-carts[5]. Trade was facilitated by the system of remitting money by bills. "A merchant requiring money to buy goods for Surat could obtain it on giving a two month's bill on that town, at any place as far up the country as Agra ; east of Agra as at Dacca, Patna or Benares, he would give a bill on Agra, where it would be exchanged for a bill on Surat[6]. Of the articles of trade in the Surat markets there were ; of mineral substances--iron, copper and alum ; and of precious stones—diamonds, rubies, rock-crystal, and excellent cups of agate and carnelian, of vegetable products wheat 'in great abundance, the best in the world'[7] infinite quantities of peas, beans, and lentils ; many medicinal drugs ; butter and oils of different sorts, to eat, to burn, and to anoint the body, of manufactured articles -black and white soap, sugar, preserves, paper wax, much opium of which the Indians, both Muhammadans and Hindus, make great traffic and use ; and indigo, 'to buy which the English and Dutch came to Surat.' But the principal article

1. De la Valle quoted by Moreland in his India at the Death of Akbar pp. 88-89.

2. Tavernier (1642-1666), In Harris, II., 350.

3. In Harris, II., 128.

4. Ogilby's Atlas, V., 211.

5. Mandelslo (1638), 59.

6. Moreland's India at the Death of Akbar Page 248.

7. The wheat, of which they are said to reap two crops in one year was chiefly exported to Goa-Pyrard de Laval, I., 210.

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exported from Surat was cloth, both silk and of cotton. This cloth was used by all people from the Cape of Good Hope to China. Some of it was rough, and some of it as white as snow, very fine and delicate. Other kinds were most artifically painted with different figures of silk, 'very neatly mingled either with silver or gold, or both.' There were also excellent quilts of stained cloth, or of fresh coloured taffeta, filled with cotton wool and stiched as evenly and in as good order as if the pattern had been traced out for their direction. Though with a thinner and shorter pile than those made in Persia, their carpets of cotton wool were excellent in fine mingled colours, some of them more than three yards broad, and of a great length. Of the richer carpets some were all of silk, 'with flowers and figures lively represented in them.' Of others the flowers were silken, but ground silver and gold[1]. The wood-work, too, was famous ; bedsteads painted and lacquered with different colours and forms, and other articles of house furniture, beautifully worked. Writing-desks, as well made as those of Germany, most skilfully inlaid with mother-of pearl, ivory, gold, silver, and precious stones. Little boxes of tortoiseshell, 'so brightly polished that there is nothing prettier.' And all 'wonderfully cheap.'[2]

Merchants.

The merchants by whom this great commerce was carried on belonged to three classes : (1) Indians ; (2) Other Asians; and (3) Europeans. Under the first class came Hindus and Muhammadans[3]. Under the second, Persians, Tartars, Arabians, Armenians[4], and many others, except Chinese, Japanese, and Jews, who were seldom found. Of Europeans there were English, Dútch, French and Portuguese.

English in Surat, 1616-1658.

The chief events in the private history of the English company in Surat during the first half of the seventeenth century were the establishment of trade with Persia in 1615 and an

1. At the same time, in certain materials and colours, the cloths of Europe would seem to have been more highly prized at the Delhi court than those of India. Rich scarlet and violet coloured cloth of gold is (1630) spoken of as a suitable present for the emperor Briggs' Cities of Gujarashtra, 67

2. Viagem de Francisco Pyrard de Lavel (1610—1620), II., 210. The same writer addes, "in these crafts all engage, nor are they behind the men of this country (Portugal), but on the contrary, far superior, having more active spirit and a finer hand It is enough for them to hear and see anything once not to forget it ; and being so intelligent, they do not deceive nor are easily deceived. I never saw peoples so courteous and good as the Indians. They have nothing of the savage as we think. They would not imitate any Portuguese customs. Mechanical work they are easily taught, so much so that the Portuguese learn more from them than from the Portuguese."

3. Ogilby (Atlas. V., 218-219) speaks of a few Parsis being traffickers. But this was at that time unusual. They were then almost all cultivators or artizans.

4. The Armenians did not become great merchants in Surat till towards the close of the 17th Century.

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alliance with the governor of Mocha in 1618[1]. In 1622 April the English joined with the Persians and together drove the Portuguese out of Ormuz and established Combroon, now called Bunder Abbas, as the chief seat of trade in the Persian Gulf[2]. This was a fatal blow to the Portuguese power in the Persian Gulf and the English had no more to fear from them in their activities in India. They had however to encounter the Dutch. In 1619 an agreement between the English and Dutch companies put a stop to the contest for the spice islands, which had been raging for several years. The Dutch in the East did not, however, respect the terms of this agreement and in 1623, by driving the English out of Amboyna, engrossed to themselves the whole of the spice trade[3]. In the same year the English at Surat were held responsible[4] by the Moghul Governor for the piracy of the Dutch with the result that the English factors were thrown into confinement and kept prisoners for seven months. From 1627 to 1630 were years of good trade. The English were on friendly terms with the Moghul and entered into large cloth contracts. Looking to its prospects and position at Surat and elsewhere, the Company thought it desirable to recognise the President at Surat as the chief of the English in India, with the result that the entire fleet in the Indian sea was placed at their command. A strong naval force thus came under the centralised control of Surat[5]. In 1630 the Dutch, failing to injure the English with the Moghul, took to depressing their stock by selling European goods at a loss and giving such high prices for Indian articles as to make the markets almost impracticable[6]. In this year the company's settlement at Bantam in Java was turned into an agency[7] and placed under the Presidency of Surat.[8] In view of the troubles

1. Both of these advantages were at least in part due to Sir Thomas Roe. The first effort to start a trade connection with Persia was in 1615, when for this purpose Richard Steele and John Crowther were sent overland from Surat to Persia. Sir T. Shirley who was sent as ambassador, also helped. Besides this, the offer fitted in with Shah Abbas' wish to have an ally by whose help he might drive the Portuguese from Ormuz. (Orme's Hist. Frag. 359). This project had Sir Thomas Roe's support, and in 1618, before leaving India, he appointed an agent to treat with the king of Persia (Sir Thomas Roe, in Kerr, IX., 255). The treaty with Persia was concluded in 1619. (Milburn's Or. Com., I., XVII) With regard to the opening of trade with Mocha, the first treaty with Mocha was made by Captain Shilinge in 1619. Roe wrote to get this agreement confirmed by the Grand Seignior and as an inducement promised that the English would undertakne to clear the sea of pirates. (Kerr, IX., 255 and 491). One of the chief advantages to the English of opening a trade with the Red Sea was, in Roe's opinion, that Gujarat merchants would send their goods in English ships, the freight would yield profit, friends would be made, and it would save the export of bullion.– Roe, in Kerr, IX, 356.

2. Cambridge History of India Vol. V, p 82

3. Milburn's Or. Com. I., XX. Some slight compensation for their losses was awarded to the English company in 1654, at the close of the Dutch war. Kerr IX., 471.

4. Hunter Vol. I, pp. 55-56.

5. Hunter · History of Br India Vol. II, pp. 59-60.

6. Bruce's Annals I., 300.

7. Foster : English Factories (1630-33) p. vii.

8. In 1634 indigo was not paying, and pepper seemed a better investment, so the Agra agency was withdrawn and a treaty made with the viceroy of Goa. (Bruce's Annals, I., 326). At this time, also, the cloths of Coromandel came to be considered more valuable than formerly, and Bantam was again made a Presidency. Bruce's Annals, I, 331.

feared from the Dutch, the English President at Surat entered into direct negotiations with the Portuguese at Goa in 1635 for an agreement which later on developed into a commercial convention[1]. Between 1630 and 1660, while their connection with Surat became of increasing consequence to the English Company, their trade suffered much by the competition of Sir William Courten's Association. The first of that new Company's ship came to India in 1635 and though they did not succeed as traders, by their acts of piracy they were the cause of much injury to the affairs of the old company at Surat[2].

Besides the losses from the competition of this rival association, the profits of the original company were much reduced by the arrival in India of ships belonging to private traders.[3] The volume of English trade with India was by no means large. In the first fifteen years (1615-29) twenty seven vessels, averaging rather more than 500 tons a piece were dispatched from Surat to London; while in the next fifteen(1630-44) the number was only twenty one. The company's servants had many difficulties to contend with, even when the land was at peace. In the purchase of goods they were hampered by the intricacies of the monetary system and the varying weights and measures; and these difficulties, combined with their slight knowledge of the various languages in which few of them attained much proficiency necessitated the employment of brokers who fleeced both sides. There were also difficulties of transport, especially in up country places. The roads were impassable in bad weather and often infested with robbers. The exaction of petty duties on the way, in spite of the imperial farmans proved a constant source of dispute, while in the cities and especially at the ports the officials were apt to be overbearing and extortionate[4].

1 With reference to this accord or agreement between the Portuguese and the English. Sir William Foster in his introduction to the Volume covering th Account of English Factories in India between 1634-36 writes : "Thus the attitude of hostility in which the Portuguese and the English in the East had stood for more than thirty years was changed into one of friendliness and mutual assistance. The pacification thus effected has lasted without a break to the present time." Page IX

2. This Courten's company in 1635 (December 12) gained a charter from King Charles I. (1625-1649). Their charter was renewed (1637), but their attempts to develop a trade with India failed. Both their settlements at Madagascar and at Rajapur on the Konkan coast were soon closed. Finally, they had to stop with a loss to themselves of £151,612 and to the original English E. I. Co. of £100,000—Macpherson 115.

3. In 1617 (September 12th) two English interlopers of 160 and 120 tons burden seized the great Surat pilgrim-ship. Fortunately they with their prize, were captured by the Company's fleet. (Kerr, IX., 453). Roe (1618) wrote to the company "you must stop (English) piracies or bid adieu to all trade at Surat and, the Red Sea" (Kerr, IX., 357) ; and in 1631 King Charles issued a proclamation to restrain the excess of clandestine trade—Milburn's Or. Com., I., XXIII.

4. It must however be said that the European trade suffered no worse treatment than the Hindu or the Armenian ; indeed his position was often strong to enable him to resist with success, and the mere threat of appealing to the emperor was sometimes sufficient to render the local authorities compliant. Above all the knowodge that the European powers were mighty at sea and could easily do harm to the lecustom revenues at the port, acted as a powerful restraint. Cambridge History of India Vol. V, pp. 93-94.

In 1640 so depressed were their affairs that the English thought of leaving Surat and, instead, of establishing a factory at Rajapur on the Konkan coast. Two years later their dealings at Surat, especially those in Agra indigo, were again prosperous and in spite of the ascendancy of the Dutch in 1645, the years between 1644 and 1648 were successful. The Basra trade, started in 1640, proved remunerative and so large were the company's profits that in 1648 the English were able to pay off their debts and recover their former position.[1] This period of prosperity lasted till, in 1653, the Dutch declared war on the English, and though, out of respect for the Moghul, the Dutch did not attack the English at Surat, their trade suffered severely.[2] But in the following year (1654) their position was recovered by the concessions the Dutch were forced to make in their favour.[3] On the other hand, they suffered during the last three years of this peiod by the trade between England and India being made open and free (1654-1657).

During this period the European ships did not complete the lading and unlading of their cargoes at Surat But having disposed of a portion of their European goods and laid in a stock of indigo for the English market, took a supply of Gujarat manufactures for the eastern trade, and sailing to Acheen and Bantam, in exchange for spices, disposed of what was left of their original cargoes and of the bulk of the Gujarat goods.[4] After the expulsion of the English from the spice islands (the Moluccas and Banda), the practice was continued by calling at Bantam[5] and taking in there a stock of pepper.

In 1614 (October) there were only two men in the English factory at Surat.[6] In 1618 the company were allowed to build a house.[7] In 1630 the president was dignified with the title of

1. Bruce's Annals, I., 442.

2. Bruce's Annals, I., 482.

3. Milburn's Or. Com., I., XX Some slight compensation for their losses was awarded to the English company in 1654, at the close of the Dutch war. Kerr IX., 471.

4. The European articles originally (1613) recommended for the Surat market by the company's factors in that city were broad cloth, swordblades, knives, and looking glasses; and for presents, toys and English bull-dogs. (Despatch of 25th January, 1613), quoted in Briggs' Cities of Gujarashtra, 60). After some experience, the factors (1616) mention quicksilver, good crooked, sword-blades, light coloured broad-cloths, ivory, lead, vermilion, coral, and pearls. Tin and Muscovy hides did not sell. (Bruce's Annals, I., 171). Cases of strong drink (1617) are also mentioned. (Kerr, IX., 454).

5. At Bantam, in Java an English factory was established in 1602. In 1619 it was the greatest place of trade in the Indian seas. The English settlement at Bantam was not disturbed either in 1621, when Acheen was given up, or in 1623, when they lost their hold on the spice islands; so important was Bantam to the English that until 1630 it was independent and a presidency. In 1630 it was made subordinate to Surat. It remained with the English, till in 1682, the Dutch took possession of it, transfering its trade to their own head-quarters at Batavia-Milburn's Or. Com., I., XVI., and II. 353.

6. Kerr, IX., 170.

7. Roe, in Kerr, IX., 253. This was one of the provisions of Roe's treaty with prince Khurram--See above, p. 19 foot note No. 4. (Typed page).

"Chief of the Honourable Company of English Merchants trading to the East,"[1] and with the increase of trade additions were made to the strength of the Surat factory. In 1638 there were at Surat from twenty to twenty-four merchants and officers, and once a year the agents of eight subordinate factories came to render an account to the president at Surat.[2] In 1642 the factory was fortified[3]; In 1646 its quick stock was valued at £ 83,600[4]; and in 1664 it is said, for space and furniture, to have excelled all houses in Surat except the Dutch factory. As early as 1623 the president of the English factory had begun to adopt considerable show. When he went out a banner and a saddle-horse were carried before him, and with him went a company of Indian servants armed with swords, shields, bows and arrows.[5]

Dutch in Surat 1618-1744.

The leading events[6] connected with the Dutch trade at Surat at this time have been detailed above, either in the general history, or in connection with the record of the English company. The chief provisions in their charter of 1618 were : (i) that their trade was to be free from any special custom-house exaction ; (ii) that their merchants were not to be molested ; (iii) that

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1. Anderson's English in Western India, 74. The use of the titles, chief and president, seems to have been changed from time to time.

2. Mandelslo, 145. The eight subordinate factories were : four in Gujarat; Ahmedabad, with an agent and six ; Cambay, Baroda and Broach, each with an agent and four. The other factories were : Agra, with an agent and six Masulipatam, with fifteen ; and Dabul on the Konkan coast, with two ; and in Persia Ispahan, with an agent and eight. In 1638, on the departure of president Methwold, fifty English merchants met together at Surat Of these, besides Methwold and his successor Fremling, there were five consult of different places in India, three ministers, two doctors and twenty-five merchants.

3. Bruce's Annals I., 393.

4. Milburn's Or. Com. I., XXVII.

5. De la Valle's letters, I., 42. Of the inner life of the factory at this time a few details are preserved. At first some of the company's servants brought out their wives with them. But to this Roe strongly objected, telling Steele (1617) that he must live frugally and like a merchant, and send home his wife. (Kerr, IX., 356). The company adopted Roe's views, and, till the middle of the century, there would seem to have been no English ladies in Surat. De la Valle (1623), whose wife was with him could not stay at the English lodge, because the president was not married. Mandelslo (1638) speaks of the president and one or two of the merchants drinking toasts to their wives in England.

In 1638 the factory would seem to have been well managed The company's servants showed 'admirable respect to the president' and the establishment was conducted 'in excellent order,' each man having his regular work assigned to him. About fifteen merchants and others dined together in the middle of the day and again there was a supper at night. The routine of an ordinary day was-prayers at 6 A M. ; dinner at mid-day, to which about fifteen merchants sat down ; prayers again at 8-.P. M. and then supper, at which the president did not appear Tea was the ordinary drink, but on Fridays Spanish wine and pale punch made of brandy, rose-water, citron-juice, sugar (and water) were allowed. On Sundays there was an extra service and sermon. But part of the day was generally spent, at one of the gardens in shouting at the mark, or other amusements. --Mandelslo, 145.

6. Milburn's Or. Com. II., 370. The chief events in the history of the Dutch company, not directly connected with Surat, were, 1596, the original company trades to Sumatra and Java ; 1602, the rival Dutch companies unite : 1602-1614 : the Dutch fight with the Portuguese in the eastern islands ; 1619, Batavia is made the Dutch head-quarters ; 1623, the English are driven out of the Moluccas ; 1658, the Dutch get possession of Ceylon.

their chief was to decide disputes ; and (iv) that no one was to be compelled to become a Musalman.[1]

On gaining a footing at Surat the Dutch determined to make the settlement in that city their chief factory in *Hindustan*, and next to Batavia, the head-quarters of their commerce in the east. Under Surat were placed fifteen subordinate factories. Of these, five, Gombroon, Bussorah, Lar, Schiras, and Ispahan, were in Persia ; one, Mocha, in Arabia ; and nine in India, at Vengurla, Agra, Ahmedabad, Cambay, Broach, Baroda, and Sirkhej. These factories did not, however, long remain under the director of Surat. Persia was subordinate for eleven years only (1622-33). Then the smaller settlements were administered from Gombroon, and Gombroon placed directly under Batavia. Mocha, after remaining under Surat for sixty-six years (1620-1686), was made subordinate to Batavia. Of the Indian factories Broach alone remained under Surat. Vengurla was in 1677 handed over to the commandar of Malabar. The other settlements were gradually withdrawn, Cambay, Sirkhej, and Baroda before 1670 ; Agra in 1716 ; and Ahmedabad in 1774.[2]

As regards conditions prevailing in the company's affairs at Surat it must be stated that the remoteness of a central authority led to the prevalence of corruption and no ports in company's employ were then considered so lucrative as those in the Western Quarters a term applied in those days more particularly to Surat, and the Persian and Arabian factories. There was private trading on the part of company's servants and it was impossible to check it in spite of occasional inspection from the headquarters at Batavia.[3]

Dutch ships reached Surat from Batavia at the end of August or in October. After unloading and taking in fresh cargo, they were sent to Persia about January, returning to Batavia in March[4]. The imports at Surat were lead, quicksilver, cinnabar, ivory, tin, copper, cumeta, cloves, nutmegs, maces, pepper, and porcelain. During this time the position of the Dutch in Surat was as high, if not higher than the position of the English. Their lodge was as grandiose as the English factory ; and when he went

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1. During little more than a century (1618-1729) the Dutch found it necessary to renew their charter no fewer than twenty-eight times, paying on each occasion considerable sums for the fresh grant of privileges. Their charter was confirmed in 1618, 1631, 1632, 1633, twice in 1634 in 1638, thrice in 1643, once in 1645, in 1650 in 1654, in 1657, four times 1662, in 1664, in 1690, in 1709, six times in 1712, and once in 1729 when the plot of land on river bank, between the outer and inner walls, still called the *Walanda Bandar*, or Dutch wharf, was granted to them to build and store merchandize. (Stavorinus' Voyages (1774), III., 101). This and the changes introduced from time to time in the customs rates show how entirely the Delhi emperors felt themselves free to alter or cancel the charters granted by their predecessors.

2. Stavorinus (1774), III., 110. The Dutch had also (1638) a factory at Rander,—Mandelslo, 61.

3. Cambridge's History of India, Vol. V, pp. 57-58.

4. Baldaeus (1660-1680), in Churchill, III., 514.

abroad the director's retinue was as large and gay as that of the English president. Unlike the English many of the Dutch factors were married[1].

French in Surat, 1620-1642.

In 1620 Admiral Beaulieu, trading to Sumatra, sent an agent to the court of the Moghul to gain leave to establish a French house at Surat. He had found no market for his European goods at Sumatra, and seeing that the people of Acheen 'could as little do without their rice as want their Surat cloth,' he determined, if possible, to established a French factory at Surat[2]. Beaulieu would seem to have succeeded in this attempt, as De la Valle, in 1623, mentions French merchants settled at Suwali[3]. But the French house at Surat did not prosper and a second attempt on a larger scale in 1642 also proved a failure.

Portuguese in Surat, 1611-1658.

In 1611 the Portuguese, taking advantage of their friendship with Mukarab Khan, governor of Surat, and of the influence their envoys the Jesuits had at the emperor's court, started a factory in Surat. No materials have been obtained to show the extent or character of the Portuguese trade at Surat . But the factory would seem to have been maintained during the whole of this period. In 1629 mention is made of an assistant agent at Surat. In 1630 two Portuguese officers went to Surat to discuss with the Moghuls measures for driving away the other Europeans from Surat, Broach, and Cambay. In 1653 the head of the Portuguese house in Surat got leave to hoist one flag on the factory, and to carry another before him when he went out. At the same time his title would seem to have been changed from factor to director[5].

Surat under Aurangzeb, 1658-1707.

In spite of the frequency of Mahratta raids upon Surat, and the growing trade of its rival Bombay, Emperor Auragnzeb's reign (1658-1707), except the few years of disorder at its close, was a time of increasing wealth and importance to Surat. The silting of the head of the Gulf of Cambay, the disturbed state of the north of Gujarat, and the destruction of Diu by the Muscat Arabs in 1670, combined to concentrate Gujarat trade in Surat. At the same time its consequence as the "gateway to the holy places of Arabia" was increased by the strong religious feeling

1. De la Valle and Herbert, quoted by Anderson, 45.

2. Beaulieu's Voyage, in Harris' Travels, I., 243.

3. De la Valle, I., 22. This was not the first attempt of the French to establish trading relations with Gujarat. As early as the year 1527, a French ship with 40 Frenchmen came to Diu. But on landing they were seized by order of king Bahadur (1526-1536), and put to death. (Faria, In Kerr, VI., 231). Some years later (1537) Francis I. tried to induce his subjects to start a trade with India, but without success.--Macpherson, 254.

4. It appears from an order issued by the king of Portugal to the Portuguese vicaroy, that in 1618 the captains of Portuguese ships traded privately from Surat to Japan and China.--Arch. Port Orient. Fas., 6., 1145.

5. Chronista de Tissuari, 75-76 ; and Tirocinio Litterario, No. 8 (1862).

among Indian Musalmans fostered by the emperor.[1] The points of chief importance in the history of this time are (i) connection of the Sidhis of Janjira with Surat ; (ii) injuries caused to the city by Maratha raids ; (iii) growing importance of its European trade.

Janjira Sidhis 1669.

The Sidhi chief of Janjira[2] who had to face the continuous attacks of the Maratha power under Shivaji, was unable to hold his own and could no longer expect any support from his master, the king of Bijapur. He therefore turned for help to the Moghul subhadar of the Deccan. By virtue of an arrangement reached, he[3] was appointed in 1669 as the admiral of the Moghul fleet at Surat. He was to receive annually from Surat treasury hundred and fifty thousand rupees to equip and maintain his fleet to protect the Moghul merchant ships and the pilgrim traffic against pirates and to keep a watch on all enemies at sea. Thus began that long connection between the Siddis and Surat which lasted for nearly a century and ended in 1759 when the English under the East India Company succeeded to this office.[4]

Maratha raids on Surat, 1664-1703.

In 1664 Shivaji determined to attack Surat. To conceal his design, he formed two camps, one at Chaul[5] and the other at Bassein. Shivaji himself started from his camp at Nasik about 1st January 1664 and his men marched through Mahuli, Kohaj, Jawhar and Ramnagar, all the detachments uniting at Gandevi 28 miles south of Surat on Tuesday 5th January. The news of his approach reached Surat like a flash of lighting, causing extreme terror and anxiety in every breast. Many people left the town with their families for safety across the river. Surat castle then had a fort-wall not very strong while the town with the main populace and the business centre lay outside the walls. At night it was learnt that Shivaji had halted only five miles from Surat. Inayet Khan, the governor of the town, who had kept no troops for the protection of the town although he drew cash allowance for their expense, fled to the fort leaving the town at the invader's mercy. Earlier Shivaji had sent special agents in

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1. The pains taken to provide and protect the Mecca pilgrim ships, the lighter custom dues paid by Musalman merchants, and (for a time their complete exemption from all customs rates, the temporary banishment (1669) of Wanias and bankers from Surat on account of a religious dispute between Musalmans and Hindus, are instances of the special favours shown at this time to the follower of Islam.

2. The community of Sidhis, or Indian Musalmans of Abyssinian descent, had their head-quarters at the island of Janjira, about forty-four miles south of Bombay. Several of them were in high military command under the king of Bijapur and one of them, Siddi Jawahar by name, was admiral of the Bijapur fleet. This chief failed in an expedition against Shivaji, was suspected of treachery and put to death. In revenge for his death, Jawahar's successor, bringing with him the whole of the Bijapur fleet, offered his services to Aurangzeb (1660-1661). Orme's Hist. Frag., 10

3. His name is Siddi Sambul, his official designation being Yakutkhan.

4. Commissariat : History of Gujarat, Vol. II, pp 172-173..

5. Chaul, now known as Revdanda, on the coast, twenty-four miles south of Bombay.

advance to inform the governor and the merchants of his intended arrival and assuring them that he meant no harm to anybody. He pointed out that he was at open war with the Emperor who had driven him out of his house and had appropriated all his treasure and belongings ; he was, therefore, in sore need of funds which he must obtain from those who had traded under the Emperor's protection. He expected from Surat about Rs. 50 lacs which could be easily subscribed by the wealthy merchants of the town. "If," he said "you fail to comply, we shall have to use severe methods of collecting money such as plunder and arson for which responsibility will be yours." Failing to get a satisfactory reply Shivaji arrived near the city at 11' o'clock in the morning on Wednesday the 6th January, camping with his followers in a garden outside the Burhanpur gate. The English and the Dutch merchants resolved to defend their own factories at all costs, though these were open houses not built to stand an attack. They could easily have found a place of safety at Suwally on the coast, 10 miles west of Surat, but they resolved to take the risk and vigorously prepared for the defence by gathering about 200 men and procuring a few guns. These they mounted on the roofs to command the broad streets.

Soon after his arrival at Surat Shivaji sent for some local merchants. Failing to get anything from them by persuasive methods, he detained some of them as prisoners and gave orders for a general plunder. Next day cowardly Inayetulla sent a young man to Shivaji with a pretended offer for peace. As conversation started he suddenly rushed at Shivaji with a concealed dagger. A Maratha body-guard struck off the assasins hand but the fellow hurled himself upon Shivaji whose clothes were stained with blood. The assassin was soon killed. The Maratha troops, being thus enraged, were about to start for a general massacre in the city ; but Shivaji sternly prohibited them from doing so. He resolved, however, to strike terror by calling in a few prisoners and cutting off either their hands or their heads. Anthony Smith who was one among them was fortunately excused as he was found to be a European. The town then was again plundered for three days and a number of houses were set on fire. "The fire turned the night into day and the smoke had turned day into night."[1] It is not possible to offer an accurate estimate of the amount Shivaji got in this manner but it must certainly have been above a crore of rupees[2]. He cared to collect only gold and silver, pearls and diamonds as he could not easily take away other things. On Saturday 9th January

1. A Parsi gentleman named Rustum Manekji was present in Surat during the sack and gave relief to the distressed Parsis of the city. He also paid Rs. 10,000 to secure the release of the Parsis detained for ransom by the Marathas (Sarkar's Shivaji page 102 Appendix).

2. The amount is one million sterling according to Orme's estimate. (Hist. Frag., 13). Thevenot, who was in Surat two years after the sack, gives 30,000,000 *livres* or about £1,200,000. (Voyages, V. 87). So well did Shivaji show himself acquainted with the treasures of Surat, that he was believed, before attacking the city, to have himself visited Surat in disguise and found out its rich houses.

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he learnt that a Moghul force was coming rapidly for the rescue of the town. Shivaji therefore removed his camp from Surat on Sunday. Shivaji had no time and he had also no mind to overcome the resistance of the English and the Dutch and thus get a few lacs more when he could get more than enough without having to fight at all. At one stage, the English having extended protection to a rich merchant near the factory by stationing troops in his house, Shivaji sent a threatening message to Sir George Oxenden, the English President, to which he replied in a resolute and defiant tone. Shivaji however did not care to take up the challenge as the main purpose of his visit had already been served.[1] Encouraged by the success of his first attack, and feeling the need of replenishing his scanty resources which were depleted in recapturing his dominions and forts from the Moghuls after his return from Agra, Shivaji suddenly arrived before the wall of Surat[2] at the head of a large force of 15,000 cavalry on 3rd Otober, 1670. Even before this, the dread of his possible arrival in 1669 had created panic and led the citizens to run away from the town. On this second occasion, the town was mercilessly subjected to plunder and fire for three days and nearly half the town was reduced to ashes. The European traders were cautions enough and had removed their goods and treasure to the harbour of Suwally beyond Shivaji's reach. The English factory at Surat was heroically defended against the attacks of the Mahrattas, who then turned to assault a Tartar sarai occupied by an ex-king of Kashgar who had recently arrived from a pilgrimage to Mecca. Another attempt on the part of the Mahrattas to attack the English factory did not make much effect. The Dutch warehouse was untouched. As their Surat Resident writes "a messenger came from the invader to assure us that no harm would befall us if we remained quiet..and we gave him our assurances that we would not interfere either for or against him." On the 5th of October two English agents waited on Shivaji in his tent outside the town with some presents of scarlet cloth, sword blades and knives. He received them in a nice manner telling them that the English and he were good friends and he would do the English no wrong.[3] On the same day about noon he suddenly retreated from the town towards Salher and Mulher, having collected a treasure worth 66 lacs of rupees ; but before he left the town he imposed an annual tribute of 12 lacs, threatening to renew the attack in case of failure to pay it. The cautions and courageous attitude of the English on both the occasions, once in 1664 and again at this time, greatly impressed the people of the country, though at the same time it excited suspicion both at Surat and at the imperial Court that the "the Christian nations had made a league with Shivaji when he was here."

1. Sardesai's 'New History of the Marathas' Vol. I pages 146-148.

2. Aurangzeb had caused a wall to be built after Shivaji's raid of 1664.

3. Sarkar's Shivaji page 172.

The effect of these raids and above all the constant rumours about them, resulted in almost complete destruction of the trade of Surat. For several years after Shivaji's withdrawal the town used to throb with panic every now and then, whenever any Mahratta force came within a few day's march of Surat. Only a week after his departure there was a rumour that he had reached Peint (Nasik district) a place about 75 miles from Surat. At once there was a general exodus and the town was changed from a busy port into the deathlike quiet of a desert. At the end of November and again about the 10th of December, the alarm was revived. For some time there was utter confusion and there was neither governor nor government for the town. In June, 1672 Shivaji's general Moropant Pingle demanded *chauth* and threatened a visitation if the payment was refused. There were panics again in October, 1672, September 1673 and October 1674 resulting in almost complete destruction of the trade and financial prosperity of the town.[1] In 1676 the Mahrattas captured the fort of Parnera (near Bulsar), about forty-eight miles south of Surat and thus for the first time established themselves permanently in southern Gujarat. In 1679, 1680 and 1684 the Mahrattas again appeared before the walls of Surat, but they seem to have failed to make their way in the city.[2] For about twelve years the city would seem to have been free from Mahratta attacks till, in 1696, it was disturbed by the news that Rajaram's troops had advanced within fifty miles. The governor of Surat was on the alert. The town fortifications were strengthened and the Mahrattas, after remaining for some time near the city, were forced to retire.[3] In 1699, however, Khanderao Dabhade was sent to collect *Chauth* from Baglan and Surat which he successfully did. In the last years of the emperor's reign the power of the Mahrattas was on the increase. Towards the close of 1702 a Mahratta army advanced within eighteen miles of Surat. Early in 1703 they came still nearer the city, burnt the suburbs and besieged the town, demanding one-fourth of the revenue as the price of their retreat. The Europeans retired to their factories and took up arms for their defence, endeavouring at the same time, by every good office, to conciliate the Mahrattas.[4] Towards the close of 1705 the Mahrattas once more appeared before Surat, and in April 1706 for nine days invested the city. By throwing out entrenchments[5]

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1. Sarkar's Shivaji 175.

2. In 1680 and 1684 so great was the alarm in Surat that the European merchants sent their treasure on board of their ships and the people of the town began to move to Suwali. Orme's Hist. Frag. 89 and 146.

3. Bruce's Annals, III., 186.

* The Marathas seem to have left Surat in February. (Commissariat : History of Gujarat, Vol II., pp. 210-11.)

4. Bruce's Annals, III., 521.

5. Bruce's Annals, III., 494 and Ham. New Act (1690-1720) I., 164. These sconces were the beginning of the outer walls. But the work of building the walls was not actually begun for seven years later.

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beyond the walls, the progress of the besiegers who were poorly supplied with cannon was stayed and the town preserved. But the blockade was continued for several weeks, and before the Mahrattas finally retired (May 23rd) the prices of necessaries had risen from two to three hundred per cent.

Aspect of Surat, 1670-1707.

Surat in the latter part of the seventeenth century was a thickly peopled town, with a population estimated at 200,000 souls. Compared with former times, its appearance was in many respects improved. The town walls were now of brick instead of mud. The city had been increased by the establishment of three new suburbs[2]. An *idga*, or Muhammadan place of prayer, had been built, and a garden laid out in one of the suburbs.[3] Of public buildings are noticed (1673-1681) the custom-house, 'with a good front'. and over against the custom-house the mint, with a 'stately entrance, in itself a large town of office.'[4] Several mosques were built from time to time. But of these, only two, with long spires, were (1673-1681) objects of any special interest[5]. In the style of private buildings there was some improvement. There were (1673-1681) very many[6] lofty houses, some of them, a century afterwards, described as having gardens filled with the most beautiful flowers, subterraneous chambers contrived against the intense heat prevailing through part of the year, and saloons where fountains were playing in basins of marble.'[7] On the other hand, the houses of the common people were still mean in appearance, 'the walls only of bamboos, placed a foot apart with reeds woven through them, and their covering palm leaves.'[8] The streets though (1690) in many places 'of a convenient breadth', were on the whole 'some too narrow,' unpaved, and in an evening, especially near the market-place so thronged that it was not easy to pass. No attempt would seem to have been made to

1. Ham. New Act., I., 164.

2. These suburbs were : (i) Ghastipura built by Chejas-ud-din, governor, 1667. (ii) Salabatpura, built by Salabat Muhammad Khan, governor, 1687. (iii) Begampura, built by a sister of the emperor Aurangzeb, who lived in Surat between 1698 and 1707.

3. The *idga* was built in 1687. The garden, known as the Begum's garden, was made by Aurangzeb's sister Jahanara Begum, the founder of Begumpura In later days the garden was one of the pleasure resorts of the people of Surat. (Commissariat : History of Gujarat, Vol. II, 364).

4. Fryer, 98.

5. Fryer, 99. These two mosques would seem to have been close together near the city wall (now the inner wall), and not far from the governor's palace on the site of the present Kawasji hospital. The towers are said to have been thrown down in the great storm of 1782.– Munshi Abdul Hakim.

6. The builders of these large houses were, as a rule, Muhammadan merchants, though a Parsi, broker to the king of Bantam, is said (1673-1681) to have 'turned outside of his pockets on a sumptuous house, a specious fabric, but ill contrived.' (Fryer, 92). The Wanias (1690) continued to live in cells or sheds, partly from their love of frugality partly through fear of the avarice of the Moghul. (Ovington, 216). As to the number of large houses there is some difference of opinion, as, according to Careri (1695), *there were not more than twelve good houses belonging* to French, English, Dutch and Muhammadans.- Churchill, IV. 18.

7. Abbe Raynal (1780), II., 34.

8. Stone, bricks, and mortar were dear (1690) : so wood, brought from Daman, was much used.—Ovington, 216.

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keep the streets clean. They were (1680) in many places 'overspread with the excrement of men and beasts.'[1] Fryer (1673-1681) wonders that a city 'whose people make the streets opposite their dwellings a dung-hill should never have been visited by the plague.'

The Plague 1684-1690.

Within a year or two after Fryer left Surat the city was visited by the plague. The first outbreak was in 1684, and for six years it raged without interruption. But though during this time the city was never entirely free from the disease, at different seasons of the year the attacks varied in intensity. Lulling during the rainy months (June to September) the epidemic broke out with fresh fierceness in October, and again abating during the greater part of the cold and hot seasons raged with renewed fury towards the end of May. The death-rate at times on a very modest calculation, amounted to three hundred a day. As late as 1689 no Englishman had been attacked.[2]

Administration of the city, 1658-1704

The form of administration remained unchanged. During this period sixteen officers held the post of civil governor of the city, giving on an average a term of about three years to each.[3] The governor had a body of troops 1,500 strong in his pay.[4] In civil matters the governor of the city was helped by the Musalman judge, or *kaji*, and by the public recorder, or *wakvanis*. For managing the customs there was a port officer, or *shahbanbar*, who appeared at the custom-house at certain times to mark the goods as they were passed.[5] The charge of the town in criminal matters was entrusted to a police magistrate, or *kotwal*. This officer had a guard of soldiers but had no capital powers. Three times during the night at nine, twelve, and three o'clock the *kotwal* went the rounds of the city. The police arrangements

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1. Ovington, 316. Fryer, 113.

2. Ovington, 347-348. This would seem to have been plague and not cholera Between 1684 and 1696 Persia as well as India was visited by the plague. At Bussorah, in 1691 a pestilence raged so violently that more than 80,000 people died, and the rest fled. (Ham. New Act., I., 84). In Western India, besides at Surat, several outbreaks of plague are about this time recorded. At Goa, in 1684, Sultan Mosam's army was attacked and 500 men died a day (Orme's Hist. Frag. 142); at Bombay, in 1690 a pestilential disorder reduced the garrison to thirty-five English soldiers (Bruce's Annals III., 94); at Bassein, in 1695 its ravages had depopulated one-third of the town (Gemelli Careri, in Churchill IV, 190); at Tatha in Sind, in 1696, 80,000 people died of the plague and above one-half of the city was desolate and left empty. Hamilton New Act., I., 123.

3. The following list gives the names and dates of the civil governors of Surat, clerks of the crown, or *mutsadi* between 1658 and 1707: Inait Khan (1658-1664); Rait Khan (1664): Muhammad Beg Khan (1666); Cheyas-ud-din Khan (1667); Zeimulad-ud-din Khan (1669); Mukhtar Khan (1671); Moat Anird Khan (1673); Aitmel Khan (1675); Kartalab Khan (1677): Aitbar Khan (1680); Shahamat Khan (1683); Mirza Sheikh Alla (1685): Salabat Muhammad (1687); Nayabat Khan (1690): Dilawar Khan (1693), and Niyat Khan (1701-1707).

4. Of these men (1673) some were armed with matchlocks, others with swords or javelins. There was a troop of 200 horse with quivers full of arrows at the bows of their saddles, lances at their right stirrup, and swords of an unwieldly bulk bucklers hanging over their shoulders, and their bows curiously and strongly made with horn, and for that reason better in dry than in wet weather. Fryer, 99.

5. Fryer, 98.

were effective, tumults seldom happened,[1] and serious crimes were so rare that during the twenty years preceding 1690 no one had suffered a capital punishment.[2] Criminals were beaten by blows of a stick and were sometimes punished in the street. To prevent crime in the country near Surat was the work of a separate officer called *faujdar*. He was allowed soldiers and servants under him to traverse the country, to look after the highways, to hunt out the robbers, and keep all suspected places quiet and safe for passengers.[3] Of the commandant of the castle, Ovington (1690) writes, "under the appearance of a high commander, he is a real prisoner, laid under a strict engagement never to pass beyond the walls of his castle." The term of the commandant's power seldom stretched beyond three years in all.[4]

Revenue, 1658-1707.

During this period, from time to time, changes took place in the rates of customs levied from the different classes of merchants. In 1664, in reward for their gallant defence against Shivaji, Aurangzeb reduced the rate of custom dues charged to the English and Dutch from 3½ to 2 per cent.[5] With regard to the amount of revenue collected, it was estimated (1666) that the dues charged on goods imported by sea amounted to a yearly sum of Rs. 12,00,000[6]. If this estimate is correct, the resources of the city towards the close of this period must have considerably fallen off, as in the detailed financial statement given in the Mirat-i-Ahmadi, the revenue from the city and mint is entered at Rs. 3,75,000[7]. According to the same statement, details of which are given below, exclusive of the amount recovered from

1. Excepting of course, the occasions of panic caused by the fear of Mahratta raids.

2. According to Ovington (1690) the cause of this freedom from crime was not so much the efficient police as 'the inoffensive conversation of the gentile Indians who are very apt to receive, but seldom give an abuse.' "This," he adds, "keeps them at a distance from all heinous crimes, and for petty failures a drubbing is a sufficient atonement to public justice."—230.

3. Ovington, 232.

4. Ovington, 217.

5. This concession would seem not to have been continued for any great length of time. In 1669 (Anderson, 156) Hindus paid five per cent and Christians four per cent. If this is correct, it may perhaps refer to Armenian Christians. That it did not apply to European Christians appears from a statement of Orme's (Hist. Frag., 96), that in 1680 Aurangzeb raised the import duty on European articles from two to three and a half per cent. Again about the same time, Aurangzeb would seem to have allowed Musalmans to trade free of dues, as Fryer (1673) says, "the revenues were somewhat fallen off of late through the Moghul too fondly, in a religious vanity, granting immunity to the Musalmans." (98). Hamilton, writing in the beginning of the eighteenth century, says, "Muhammadans pay two per cent., Christians three and a quarter per cent, and Hindus five per cent,"—Ham. New Act., I., 164.

6. Thevenot, V., 81.

7. It is difficult to say to what year the detailed financial statements in the Mirat-i-Ahmadi refer. Apparently they are the current revenue (1748-1762) recovered when the author wrote. But since, as early as 1725 the revenues of the districts round Surat were collected by the Marathas, these statements must have been taken from some earlier accounts. The reasons for attributing them to the beginning of the eighteenth century, are: (i) that the total agrees tolerably closely with thirteen lakhs of rupees, the total given by Hamilton in his New Account I.,

the city, the districts under Surat yielded a yearly revenue of Rs. 8,61,590.

The financial details given in the Mirat-i-Ahmadi appear from the following tabular statement :—

STATEMENT OF THE REVENUES OF THE SURAT GOVERVORSHIP ABOUT 1700-1710

Name of sub-division	Yearly revenue in Dams	Yearly revenue in Rs.
1. City and mint ...	1,50,00,000	3,75,000
2. Chorasi ...	41,67,550	1,04,190
3. Rander ...	2,65,000	6,620
4. Amroli ...	15,40,000	38,500
5. Bulsar ...	35,77,000	89,430
6. Chikhli. ...	16,00,000	40,000
7. Marasrah (?) ...	6,70,000	16,750
8. Barnoli and Momlah (Bardoli and Mota) ...	5,00,000	12,500
9. Ghandevi (Gandevi) ...	23,00,000	57,500
10. Hanosar (?) ...	1,00,000	2,500
11. Malur (Walod) ...	3,94,893	9,870
12. Ghadkah or Khadkah (?) ...	1,40,917	3,520
13. Sahrat (?) ...	1,60,000	4,000
14. Malwarah (Walwara) ...	1,98,288	4,960
15. Anawal ...	50,200	1,250
16. Lohari (Buhari) ...	1,00,000	2,500
17. Nabiah or Baniah (?) ...	15,44,000	38,600
18. Sarbhon ...	12,25,000	30,620
19. Kherod (Karod) ...	6,92,000	17,300
20. Sosah (Supa) ...	16,40,000	41,000
21. Mhowah (Mahuwa) ...	7,50,320	18,760
22. Biadrah (Wihara) ...	8,36,325	20,910
23. Kos (?) ...	1,20,320	3,010
24. Barjul (?) ...	53,77,371	1,34,430
25. Talari (Telari) ...	4,96,000	12,400
26. Kamerj ...	19,35,000	48,380
27. Nausari (Navsari) ...	6,03,200	15,080
28. Taleshwar (Tadkeshwar) ...	34,80,278	87,010
Total ...	4,94,63,662	12,36,590

149, as the average Surat revenues for the fifteen years ending 1705, and (ii) that after the close of Aurangzeb's reign, the Surat revenues rapidly fell off. According to Hamilton, the total of thirteen lakhs collected from three sources : (i) customs at the rate of two per cent from Muhammadans, three and a quarter from Christians, and five from Hindus ; (ii) land-tax of three-fourths of the crop paid in kind ; and (iii) poll-tax of about one crown a head.—Ham. New Act. I, 149 and 164.

Note :—40 dams = 1 rupee.

The territory known as the Surat athavisi, or governor-ship of twenty-eight sub-divisions, may be roughly described as the lands that lie between the Kim and the Damanganga rivers, and west of the Rajpipla, Bansda, and Dharampur states. It is difficult to determine what twenty-eight sub-divisions were originally included in Surat governorship. The map of the Surat athavisi, prepared in 1816, shows all lands south of the Kim, dividing the whole area into thirty-one administrative sub-divisions as follows :—

I. North of the Tapi river.

British		*Gaekwar*
1. Olpad	Modern Mandvi	1. Wasravi
2. Tadkeshwar		2. Galla
3. Mandvi		

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MERCHANTS, 1658-1707

Among the Indian merchants of Surat there were during the seventeenth century men of every great wealth[1]. Of these (1673), some had their head-quarters at Surat ; others, though only agents for trading houses in the interior, 'bore a port equal to the European companies'[2]. The rich Musalman and Parsi merchants lived in great style. But the Hindus, however much money they might have, strove to conceal it, living frugally and keeping their dealings as secret as possible. This may partly have been done from fear of the exactions of the Musalman officers. But it was probably to some extent their own choice, as at times they would seem to have openly made great display of wealth, loading their wives and children with ornaments, and spending large sums on the occasions like marriages and deaths in their families[3]. Of the skill of the Hindu merchants of Surat, Ovington (1690) says, "by the strength of his brain only he will sum up accounts with equal exactness and quicker despatch than the readiest arithmetician can with his pen[4]."

Trade, 1658-1707.

This was the time of Surat's greatest commercial prosperity. It was (1695) 'the prime mart of India, all nations of the world trading there ; no ship sailing in the Indian ocean, but what put into Surat to buy, sell, or load.'[5] The general course of its traffic was in most respects the same as in the previous period. At Surat itself some changes had taken place in the arrangements of the port. On account of the opportunity it gave for smuggling, no vessels, except those belonging to Europeans, were allowed to lie at Suwali, but were forced to remain off the bar,

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II. Between the Tapi and the Damanganga rivers.

British		*Guekwar*
4. Chorasi		3. Kamrej
5. Karod	Modern Bardoli	4. Timba
6. Sarbhon		5. Balesar
7. Walod		6. Wihara
8. Buhari		7. Songarh
9. Parchol	Modern Jalalpor	8. Marolı
10. Supa		9. Telari
11. Chikhali		10. Mahuwa
12. Balsar	Modern Bulsar	11. Wisanpur
13. Parnera		12 Gandevi
14. Bhutsar	Modern Pardi	13. Walwara
15. Bagwara		14. Wewal
		15 Antapor
		16. Anawal

1. *In 1664 two families* in Surat are said to have been the richest merchants in the world. (Orme's Hist. Frag., 13). One Hindu merchant (1666) was calculated to be worth at least eight millions. (Thev., V., 46). This is probably *livres*, and so would represent about £333, 333 (see Abbe Raynal, II. 29) ; and in the shop of another Hindu, Shivaji (in 1664) is said to have found twenty-two pounds weight of strung pearls. (Thev. V., 86). The English brokers are said (1690) to have been worth from 15 to 30 lakhs of rupees. (Oving. (319) Towards the close of the 17th century, Mulla Abdul Jafar had begun to trade. This merchant is said to have had nineteen ships laden with stock of his own, each of them worth from £10,000 to £25,000. (Ham. New Act., I., 148). In 1695 some of the merchants are said to have been rich enough to load any great ship out of one of their warehouses Careri in Churchill IV 189.

2. Fryer, 115.

3. Ovington, 317-319. 4. Ovington, 279.

5. Gemelli Careri, in Churchill, IV., 188. Ovington also (1689) calls it the most famed emporium of the Indian empire.—218.

where the dues were paid[1]. Again, instead of bringing goods from the ships to Surat by land in carts, towards the close of the century (1690) the ordinary practice would seem to have been to unload the cargoes of great ships into hoys, yachts, and country boats, which at that time were said to pass up the Tapi with 'great convenience and expedition.'[2] In Surat (1690) the foreign merchants laid out their bales in the castle green and prepared them as loadings for their ships. Near the market-place, especially of an evening, the local dealers thronged, standing in the streets with silks and stuffs in their hands or on their heads.[3] Thevenot (1666) thus sums up the articles of trade in the Surat market:– All kinds of Indian cotton goods, all the wares of Europe and of China ; diamonds, rubies, pearls, and all other kinds of precious stones; musk, amber, myrrh, incense, manna, sal ammoniac, quicksilver, lac, indigo, and the red dye ruinas, and all kinds of Indian and other eastern drugs[4].

As in earlier times, the chief articles of export (1690) were agates, carnelians, desks, cabinets, and boxes neatly polished and embellished, silks, velvets, taffetas, satins, and cotton cloth. Next to the manufacture of cloth, one of the most important industries of Surat at this time, would seem to have been ship-building. In 1688 mention is made of 'a very comely stout ship over one thousand tons being built in the river at Surat ; and the ship carpenters are said to be able to take the model of any English ship in all the curiosity of its building as exactly as if they had been the first contrivers.[6] As to the ordinary profits of trade, Ovington says that (1690) in the trade between Surat and China, profits of one hundred percent were to be made, and that by simply sending out silver and bringing back gold a profit of twenty-five per cent might be cleared. With regard to the rates of interest, money could be borrowed by Englishmen of credit and esteem on private security at twenty-five per cent, this rate including all risk of loss at sea[7].

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1. Thevenot, V., 78.

2. Ovington, 218. Some account of the state of the river is given under the head Tapti, pp. 12-14. In 1666 there is said to have been so little water on the bar that, except at spring-tides, ships even unladen could not pass up the river. At spring-tides they came opposite Surat, especially when they wanted repairs. (Thevenot, V., 78) Again (1673) the Tapti is said at spring-tides to bear ships of one thousand tons burden up to Surat walls. But because of the sands, the ships had first to unload. (Fryer 1681), 106.

3. Ovington, 216-217.

4. Thevenot, V., 53. Tavernier (1642-1666) gives the same account of Surat trade. (Harris ; Voyages, II., 350). On the subject of the import of money, Fryer (1673) says, "though treasure is not the growth of this country, yet the innate thrift of the gentile, the small occasion of foreign expenses, and the humour of laying up their talent in a napkin, buries the greatest part of the treasure of the world in India."—Fryer, 112.

5. Ovington, 218—Indigo is said to have been more in demand than ever. Raw cotton was now exported in some quantity, and as early as 1684 attention was turned to the pressing of it into bales.—Anderson, 76.

6. Ovington, 200 and 280. In one passage Muscat Arabs, and in another Parsis, are mentioned as ship-builders.

7. Ovington, 389-391.

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English in Surat, 1657-1684.

Of European settlers the four most important were the English, Dutch, French, and Portuguese. The history of the English company at Surat during the reign of Aurangzeb contains two sections,—the first of twenty-seven years from 1657 to 1684, when Surat was still the chief English settlement in India ; and the second, of twenty-three years when, partly owing to the growing importance of Bombay, and partly because of the disorders at Surat, the importance of their establishment in that city declined. In 1657 the English company at Surat, fearing an increased competition from private merchants, made all possible retrenchments. The grant of the charter of 1657 restored confidence and Surat again became the head of all English factories, including Madras and Bantam.[1] The President at Surat was to have a special charge over the factories of Ahmedabad, Tatta and Rajapur; (on the Malbar coast) whether in addition factories were to be maintained at Agra and Lucknow was left to his discretion.* Unfortunately at this time on account of the disturbances caused by the sons of Shah Jahan, trade at Surat was unfavourable.[2] In 1661, by the grant of the fresh charter, the affairs of the company were placed on a firm footing. But trade was not prosperous and, with the exception of Agra and Ahmedabad and Gombroon in Persia, it was thought well to confine the company's trade to the Malabar coast, Madras, Surat, and Bantam.[3] In reward for the brave defence of their factory against Shivaji (1664), the emperor granted the English for one year entire remission of customs, a boon worth Rs 25,000, and afterwards an abatement of one per cent in the rate levied.[4] On the other hand, there was at this time (1665-1667) war between the Dutch and the English ; and the Dutch, sending strong fleets to western India, blockaded the mouth of the Tapi, and gaining a hold on the Malabar coast they had for a time a monopoly of the pepper trade in addition to the command of the produce of the finer spices. Tidings of the formation of a new French company added to the embarrassment of the English. In 1666, the war with the Dutch and French, the Moghul's suspicions of English designs since their acquisition of Bombay, and the disturbances between Shivaji and Aurangzeb made trade

1. Bruce's Annals, I., 532.

2. Bruce's Annals, I., 541.

*William Foster : English Factories in India (1655-60), p. 142.

3. Bruce's Annals, II., 108. In 1662 (March 19th) Sir George Oxenden was made president and chief director of affairs at Surat and all other factories in the northern parts of India from Ceylon to the Red Sea. (Bruce's Annals, II., 107). In 1662 the English troops that had been prevented by the Portuguese from taking possession of Bombay landed at Suwali. Their arrival caused so much alarm at Surat that the governor, threatening to destroy the English factory, forced them to re-embark. Orme's Hist. Frag., 23.

4. Bruce's Annals, II., 145. The charter reducing the custom rates from three to two per cent would seem not to have been received till 1667—Bruce's Annals, II, 217.

5. Bruce's Annals, II, 163. Before war was declared Sir. G. Oxenden (1665) wrote : "Unless a sufficient naval force is despatched from England to counterbalance the Dutch, it will be impracticable for the presidency at Surat to proceed with the trade of that port."—Bruce's Annals, II., 158.

"precarious, if not hopeless."[1] But two years later (1668), by the transfer of the island of Bombay from the English Crown to the English company, the company gained the position of independence they so much wished.[2] From England instructions came that on the strength of the increase of their power the company were determined to 'compete with the Dutch and resist them as far as their means would allow.' The interest in Bantam was strengthened and subordinate factories were re-established at Karwar, Rajapur, Batticolo, Calicut and Acheen.[3]

English in Surat, 1657-1684.

In the following year (1669) a council of eight members, five of whom where to be constantly resident at Surat, was chosen to assist the president. The president was to be governor of Bombay but was to stay at Surat. The management of the company's affairs in England was vigorous, more goods were sent out, instructions were received to keep open the Persian trade at all costs, and by the establishment of the factory at Karwar the share of the English in the pepper trade was recovered.[4] In 1670, seeing how exposed Surat was to the raids of the Marathas, the English merchants sent the most valuable part of their property to Suwali.[5] More than once their factory was attacked, but on each occasion it was well and successfully defended. In the next year, besides Mahratta attacks, the company's servants had to contend against the hostility of the governor and the rivalry of the French who, by their careless trading, seriously lowered the value of European goods and raised that of Indian products.[6] About this time (1673-1675), in addition to the reduction in the margin of profit, the Surat trade in several particulars became less advantageous ; the calicoes of the Coromandel coast were preferred to the piece-goods of Surat ; West Indian competition was reducing the demand for indigo ; and less lac was required, as wafers were taking the place of sealing wax.[7]

1. Bruce's Annals, II., 174.

2. The chief events in the history of Bombay before this transfer were : Bombay received as part of Queen Katherine's dower (1661). Portuguese refused to give it up (1662). Governed by an officer under the English Crown (1662-1668). Not paying, is handed over to the company (1668).

3. Bruce's Annals, II., 201-202.

4. Bruce's Annals, II., 252-254. The following details show the extent of the company's trade at Surat at this period (1668-1673) : In 1668 six ships came from England with goods and bullion to the value of £130,000 ; in 1669, 1,200, tons of shipping and stock valued at £75,000 ; in 1670, 1,500 tons of shipping ; in 1672, four ships with cargo valued at £85,000 ; and in 1673 stock and bullion to the value of £100,000. (Anderson, 150). The following details show the state of the company's trade at Surat in 1670 : Dead stock, £18,151 (Rs. 1,81,510) ; desperate debts, Rs. 86,500 ; good debts, Rs. 99,260 ; investment for providing goods, Rs. 2,62, 310 ; goods embaled ready for England Rs. 6,11,080 ; goods for sale, Rs. 1,30,040. Total £136,473 (Rs. 13,64,730) —Bruce's Annals, II., 287.

5. Bruce's Annals, II., 286.

6. So far did this depression in trade go, that in 1675 in Surat European goods had fallen below cost price, and money could not be borrowed, while in England the coarser Surat cloth was unsaleable.—Bruce's Annals, II., 376 and 383.

7. Bruce's Annals, II., 357.

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Under these circumstances, in spite of a better year in 1677, Surat was (1678) reduced to an agency, and the pay of the company's servants lowered.[1] In 1681 Surat was, however, again raised to the rank of a presidency, and an attempt was made to revive the old route to Surat by way of Socotra, the Red Sea, and the Persian Gulf. But owing to the competition of the Armenians this attempt failed. Meanwhile the profits of the company were in 1680 reduced by an order of the emperor, raising import duties from two to three and a half per cent, an order which in 1682 was extendedto the importof bullion.[2] In 1683 (November 3rd) the number of the company's servants at Surat was increased by the arrival of the factors who in the previous year had been driven out of Bantam by the Dutch.

At the time of the revival of the English interest in 1668, some changes were made in the character of the English trade with Surat. The factory in Bengal now competed more than formerly with western India, and orders were issued to ship saltpetre by way of Bengal instead of by Surat[3]. This would seem to have been one of the causes that led to the increased export of cloth from Surat to England, a change which raised up a new set of enemies to the company. In 1674, 1680, and 1697, the weavers of silk and cotton cloth in England objected so fiercely to this importation of foreign cloth, that in 1701 an Act was passed ordering that no silk or cotton cloth made in India was to be worn in England.[4] Though in 1660, the company retired from the country or coasting trade in India, leaving it in the hands of its own servants, it continued for some time (1673) to be the custom for the ships from Europe, after they had unladen their cargoes[5] at Surat, 'to go down the coast and, calling at Rajapur for fine cloth, at Karwar for coarse cloth and the weightiest pepper, and at Calicut for spice, ambergriz, granates, opium, and saltpetre, to come back to Surat before the caravans from up-country had arrived there with their wares.'[6] Another article of export was coffee which made its first appearance in the company's sale lists at the beginning of 1660. This commodity was easily procurable at Surat whence there was a constant trade with the Red Sea ports. In the sea borne trade in tea from China also, supplies came to be procured from Surat and Madras as the intermediaries after the withdrawal of the English factors from Bantam in 1682.[7]

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1. Bruce's Annals, II., 421. Profits would seem to have greatly decreased, as in 1618 an order was passed that money was not to be taken up in India at more than six per cent. interest.—Bruce's Annals, II., 461.
2. Orme's Hist. Frag., 96.
3. Bruce's Annals, II., 201. The first English settlement in Bengal was made in 1636 in consequence of the privileges granted to Surgeon Boughton.
4. Milburn's Or. Com., I., XL.
5. These cargoes were (1669) chiefly green and red broad-cloth ; large proportion of copper, tin, lead, and alum ; small quantities of vermilion, quick silver, and good ivory.—Bruce's Annals, II., 265.
6. Fryer, 86.
7. Cambridge History of India, Vol. V, p. 111.

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English in Surat. 1684-1707.

By 1683 the situation at Surat was becoming increasingly untenable. The roving bands of the Marathas kept western India in a state of turmoil and alarm and compelled Aurangzeb to start on his famous expedition to the Deccan. The Moghul Governor of Surat would not allow foreigners to raise their own garrison nor could ensure to them effective protection on land. The English factory in Surat, separated from the sea by fourteen miles of a river which was not easily navigable could not be effectively defended by sea. The company soon realised that safety for its position in the west could only be found under the guns of its ships. Accordingly in 1684 orders were received to transfer the chief seat of the company's trade from Surat to Bombay. But at first, on account of the mutiny of troops at Bombay,[1] d afterwards because of the war between the English and Moghul emperor, the actual transfer did not take place till 1587. In 1685 instructions were received from England that the company meant to establish themselves in a position of independence in Bengal by capturing Chittagong, and in Bombay by 'recovering Salsette and the other dependencies of Bombay originally ceded by the treaties between Charles II, and the crown of Portugal.'[2] Bombay was (1687) to be fortified in the strongest manner, and to become the capital of the company's Indian possessions and the residence of the governor-general. The ships from Europe were to clear out of Bombay and not from Surat, and the trade with Surat, still the residence of an agent of factory was to be carried on through Bombay coasting vessels, taking English goods to Surat and bringing back the Gujarat exports.[3] Sir John Child did not leave Surat for Bombay till 1687 (April 25th). Some of the factors remained behind in Surat and on news of the capture of Musalman vessels by Child's orders, were seized and imprisoned by the governor of Surat. Sir John Child now drew up a statement of the grievances he complained of at Surat,[4] and to enforce his demands for redress, in 1688 (October 9th) appeared at the mouth of the Tapi with an English fleet. This measure failed. The governor would not give up his prisoners and Child was forced to retire. Child on his way back to Bombay, seized some ships belonging to the Siddi, and refusing to give them up, the Siddi landed in Bombay. Aurangzeb was at this time free to help the Siddi, and the English were forced to beg for peace (1689, December 10th). Their prayer was granted, and though treated with much dishonour and compelled to pay a fine of £ 15,000, the English in Surat were set free and

1. The mutiny at Bombay broke out 27th December 1683 and ended 19th November 1684.--Bruce's Annals, II, 541.

2. Bruce's Annals, II., 558-561. By the home orders of 1685, Sir John Child had been made a baronet, and appointed captain-general and admiral of all the company's forces by sea and land in northern India - Bruce's Annals, II, 552.

3. Bruce's Annals II., 661-612.

4. The chief grounds of complaint were that the English were now charged 3½ per cent, instead of 2 per cent as formerly, that the govrnor gave them no ship in recovering their debts and that their garden and wharf had been taken from them : Hamilton. New Act I, 203-215.

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allowed to resume their work of trading (1690, April 4th).[1] So much did the reputation of the English suffer by this war that, as the Surat council wrote to the directors, "without a large supply of shipping, stock and servants, we can never regain the trade or benefits of former grants."[2] After the close of Child's war (1690) the English interest in Surat declined. In spite of their revenues the company was determined to continue their efforts to establish themselves as an independent power at Bombay. "The Moghul", they wrote, "should see that the English company were no longer dependent on him for help and countenance in Surat. There were other markets where his power did not reach. Ships loaded at Calicut and Karwar should sail from Bombay to Europe, and let the Surat traders see that goods were to be found in other parts of India besides Gujarat." This show of independence on the part of the company's managers would seem to have yielded good results. The emperor treated the English with better consideration, granted a licence for the Bengal trade, and agreed to pay a sum of £ 8,000 as compensation for the goods plundered from the English factory in Surat.[3] After their re-establishment at Surat, affairs did not go well with the company. The war with France, the competition of private traders, and the vengeance taken by the governor of Surat on account of the excesses of European pirates, served to injure and depress the English trade.[4] In fact, exasperated by constant European piracies Aurangzeb had given orders to put a stop to all European trade ; but on the English, French and Dutch agreeing to act in concert to suppress piracy, he reversed them and informed the Surat governor to settle the matter in his own way.[5]

New English Company, 1698.

In 1698 the company's affairs suffered still more severely by the formation of a new English company. In 1700 the representatives of the new company, with Sir Nicholas Waite as their chief, arrived in Surat. There was much ill-feeling between the servants of the old, or London, and the new, or English companies. So far was this carried that Sir John Gayer (1700), the head of the old company, recommended that their factory should be withdrawn from Surat. The importance of the new company was for a time increased by the arrival of the ambassador, Sir William Norris. The chief object of this mission was to free the new company from any share in the responsibility for protecting the Surat trade against European pirates with which the London company was burdened. But this embassy

1. During the whole of this time, the agent, Mr. Harris, and the other servants of the company in Surat, remained 'imprisoned in irons'.- Bruce's Annals, II., 639.

2. Bruce's Annals, II., 642. Sir J. Child did not survive the defeat of his plans. He died 1690, February 4th.

3. Bruce's Annals, III., 96.

4. In 1695 five of their ships were seized by the French (Bruce's Annals, III., 180) ; in 1693 trade was suspended at Surat on account of piracies (Bruce's Annals. III., 146) ; in 1695 the factors were imprisoned, and kept in confinement till 1696 (June 17th) (Bruce's Annals, III., 189).

5. Pirates of Malbar by Col. John Biddulph pages 52-53.

proved a failure, and was very costly.[1] The Indian authorities while taking little interest in the controversy were naturally inclined to support the representatives of the older body ; and when at Surat the new company's president Sir Nicholas Waite tore down the flag that floated over the rival factory it was at once replaced under a militaryguard sent by the Moghul governor.[2] Another device of the President of the new company for lessening the power of its rival in Surat was more successful. By suggesting that the members of the old company were connected with the excesses committed by the English pirates, by warnings that now at any time the old company might desert Surat leaving their debts unpaid, and by bribery, Sir Nicholas Waite procured an order from the Delhi court directing that Sir John Gayer and the other members of the London company should be seized. A force was accordingly sent by the Surat governor to Suwali and (1701, February) seizing Sir John Gayer, his wife, and several factors, brought them to Surat and for a time confined them in the governor's house. After a fortnight the prisoners were transferred to their own factory. At first there were no fewer than 107 persons in confinement. But by the end of two years (1703, January) their number was reduced to twenty-two.[3] During this time, though rationed as prisoners and unable to leave the factory walls, the company's servants would seem to have been allowed to trade.[4] In 1703, in consequence of more piracies by English captains, the governor attempted to lay hold of the factors. But they defended the factory for twelve days, and the governor's rage somewhat abating, they were allowed to remain in their former state of modified confinement. In England, in 1702 (July 22nd), the interests of the rival companies had been united by the grant of a charter of union. But at Surat the rivalry was too keen to allow the members of the different factories at once beginning to work comfortably together. In 1704, at Surat, orders were received appointing Sir John Gayer general in Bombay and Sir Nicholas Waite president at Surat. At the same time these orders contained the provision that should Gayer not be released within three months, Waite was authorized to act in Gayer's place as general. Taking advantage of this provision, Waite left Surat for Bombay and acted there as general till 1707, when he was dismissed from the service.[5] Before leaving Surat in 1704, Waite is said, instead

1. The charges are said to have amounted to £80,000. Norris, fretted with the delays and worries of his mission, left India broken in health, and died of dysentery on his voyage to England October 10th, 1702

2. Cambridge History of India, Vol. V, p. 105

3. The details were : 1 general, 1 president, 3 members of council, 1 chaplain, 9 factors, 6 writers, and 1 surgeon- 22.

4. Hamilton (1690-1720) writes : "it was generally believed that it was only a piece of policy on Gayer's part of going to employ his money in private trade." (New Act, I., 239). But this seems inconsistent with the other accounts of these events.- -Anderson, 267, and Bruce's Annals, III. 404-666

5. Bruce's Annals, III., 636.

of making any effort to obtain Gayer's release, to have done what he could do, by bribery and misrepresentation, to strengthen the governor in his determination not to set Gayer free. So successful was the course adopted by Waite, that the factors of the London company remained in confinement till, in 1707, by the vigorous steps taken by the Dutch, their own demands were conceded and at the same time the English factors were set at liberty.[1]

English Imports

The chief articles brought by the English to Surat at the close of this period were lead in pigs, barrels of tar, swordblades and pen-knives, spectacles, looking-glasses, swinging glasses, hubble-bubbles, and rose-water bottles. Among articles valued as presents are mentioned long guns, brass guns, large glass cisterns and flowered cloth, green, scarlet and white.[2]

The English Factory.

As organized in 1669 and 1675 the factory at Surat consisted of the president[3] and a resident council of four and under them a subordinate body, generally about twenty-eight strong, divided into the three grades of merchants, factors and writers. After the president, who with a salary of £ 500 a year, issued all orders and disposed of all preferments, there came his four resident councillors. Of these, the first in rank was the accountant, on £ 72 a year, who acted as a treasurer and prepared the accounts for audit ; the second was the store-keeper, on £ 40 a year, who registered the sales of European and the purchase of country goods ; the third, the purser marine, also on £40 a year, who gave an account of all exports and imports, provided stores, and discharged other duties connected with the shipping ; and the fourth, the Secretary, on £ 40 a year, who modelled all consultations, recorded all transactions and affixed the company's seal to all passes and commissions.

Of the three grades into which the body of the company's servants were divided, that of merchants was the highest. These, who were men of more than eleven years' standing, received £ 40

1. Bruce's Annals, III., 619. No direct mention of Gayer's release has been traced. Anderson notices (378) that, from a reference to him in the letters from England in 1706, Gayer was still in confinement. But it is possible that he had before this been set at liberty, though the news of his release had not reached England when the directors' letter was written. It seems strange that in 1708 when Waite's services were discontinued, Aislabie, and not Gayer, should have succeeded him as general. Probably it was due to the "New" element in the United Company that Gayer was so hardly used.

2. Surat Diaries for 1700.

3 List of presidents of the seventeenth century.

Aldworth	... 1613-1615	Revengton	
Kerridge	... 1615-1623	Andrews	1662-1669
Thomas Rastell	... 1623-1626	Sir George Oxenden	1662-1669
Wyld	.. 1626-	Gerald Angier	.. 1669-1677
Methwold	... 1638	Rolt	... 1677-1682
William Breton	.. 1638-1644	Sir John Child	... 1682-1690
Francis Breton	. . 1644-1649	Bartholomew Harris	. . 1690-1694
Captain Jeremy Blackman	... 1650-1655	Danial Annesley	... 1694-1700
Nathaniel Wyche	... 1658	Stephen Colt	... 1701-

a year.* From their number any vacancies in the council at Surat, or among the chiefs of the branch factories, were filled up. The second was the grade of factors, men of from six to eleven years' service, paid at the rate of £ 20 a year. This grade was divided into two classes, senior factors of from eleven to eight, and junior factors of from eight to five years' service, the third was the grade of writers, men of less than five years' service with salaries of £10 a year. A fourth grade called apprentices, youths who worked without pay in the hope of preferment, is provided for in the orders of 1675 ; but this grade, if it ever had any actual existence, would seem soon to have been given up.[1] Besides the mercantile establishment, other Englishmen were employed in connection with the factory. Of these the highest in position, holding the rank of third in the factory, was the minister or chaplain who, with a salary of £100 year, was expected to read prayers twice every day of the week, preaching once in addition on Sundays to catechise the youth, and to visit the subordinate factories on the Malabar coast. Next there was the surgeon, like the merchants, on £ 40 a year, who apparently was helped by an Indian doctor of physic.[2] There was also generally an European cook and about seventeen other Englishmen in subordinate positions, some of them attached to the Suwali marine, the rest forming the president's guard.[3] Besides these resident members of the Surat factory, one or two of the chiefs of subordinate factories were generally elected members of the Surat council.[4]

Of Indians attached to the factory there was the 'master' to teach the young men to write and read the Indian languages. But a good knowledge of those languages few of the company's servants were said to attempt and fewer to gain.[5] There was also an Indian doctor of physic to help the English surgeon, and an Indian cook. Besides, there was a body of forty Indian messengers, porters and domestics, of whom all the English members, according to their position, had some to wait on

1 Bruce's Annals, II, 375 Compare Fryer (1673-1681), 84, and Anderson, 191.

2. Ovington (1690). 402.

3. Fryer, 85.

4. Fryer, 85 The new or English company started, 1700, in Surat with an establishment of, including the president, forty Europeans Of these, twenty-six, employed on mercantile business were engaged at the following rates of pay. The president on £500, with a second £500 as table-money ; a member of council on £100 a year ; five chief factors on £60 a year ; other five factors on £40 a year ; and fourteen writers on £20. Besides these, there were fourteen others : a chaplain on £100 ; a surgeon on £30, and a Goanese cook on £20 ; ten soldiers and a trumpeter, who received £4 each and a suit of clothes. The factory was not always, however, kept up at this strength. During the first three years of its establishment in Surat eight persons had died and seven been dismissed, and though their places were to some extent supplied, the strength of the factory was in 1704 (February 21st) reduced to twenty, of whom fifteen belonged to the strictly mercantile establishment. At that time the monthly expenses of the factory, including steward's disbursements, peons' wages, stationery, and other small charges, varied from £150 to £200 (Rs. 1,500 to Rs. 2,000). Anderson, 366.

5. Fryer, 85.

them in their chamber and follow them out.[1] In matters of business the details of the carrying out of almost all orders were left in the hands of the Indian merchants, from whom the company's brokers were chosen.[2] The collection of piecegoods for export required a somewhat elaborate arrangement. To ensure a steady supply of these goods, money had to be advanced to the weavers. This was one of the parts of the business entrusted to the Indian brokers. These men went into the districts, employing clerks, or *gumastas*, on a monthly salary to see that the weavers acted up to their agreements. Sometimes, it is said, between the agents and the weavers were another class of small brokers called *dalals*.[3]

Though their salaries were so small, the English servants of the company lived comfortably in Surat, and in many cases returned to England with large fortunes. Of perquisites, in addition to their pay, the young men received from the brokers at every *diwali* festival (September-October) presents of jewel and cloth, 'enough to serve them for great part of the year.' The chaplain had his private gifts from merchants and masters of ships and his 'noble large gratuities for officiating at marriages, baptisms, and burials[4]. The surgeon gained considerably by his 'outward practice and traffic.' Those of the members of the factory who were in a position to engage in trade had other opportunities for making a fortune. Though the privilege of private trade was withdrawn in 1657, the country trade between ports east of the Cape of Good Hope was, in 1661, handed over to the company's servants. Such was the profit in this trade that even those of the merchants who had no capital of their own could afford to borrow from local money-lenders, paying them at the rate of twenty-five per cent. Another source of profit during part of this time was the trade in diamonds which, though taken away from their servants in 1680, was again restored by the company in 1698. The new company (1698) allowed their servants both the privilege of private trade and the right to trade in diamonds.

To illustrate the mode of life of the English in Surat during the latter part of the seventeenth century the following details

1. Fryer, 85.

2. Fryer, 85.

3. Fryer (1673-1681) says "the factors oversee the weavers, buying up the coton-yarn to employ them all the rains, or else the chief broker employs Banians in their stead, and is responsible for their fidelity." - 86

4. Ovington. Chaplains are said to have frequently remitted at least the whole of their salaries to England. (Anderson, 271). Perhaps, like the Dutch ministers of the 18th century, the English chaplains knew 'to avail of their visits to stations on the Kanara coast for the advantage of their pockets by taking with them as much merchandize for sale as they can find room for in the ships by which they take their passage.' Stavorinus (1774), I. 307.

5. A third source of gain would seen to have been a commission on transactions carried out on behalf of traders in England. Thus Fryer (1673) says, "none of the Surat council if known in England but makes considerably by his place after the rate of five per cent commission." "This," he adds, "is the Jacob's ladder by which they ascend."—85.

are available : The house which accommodated the whole of the company's establishment had, through the liberality of the emperor Aurangzeb who was their landlord, gradually been beautified and enlarged till, besides several 'decent apartments'[1] for the president, it could lodge forty persons, and had the convenience of several cellars and warehouses, of a cistern of water and of a bath.' Built of stone and excellent timber with good carving, 'without representations,' their house was contrived after the fashion of the Moors buildings, with upper and lower galleries or terrace-walks, a neat oratory, and a convenient open place for meals. Within the factory was a chapel 'decently embellished,' but, to please the Moors, without the figure of any living creature in it. In this chapel, about six in the morning, the whole company came together to hear prayers read by the chaplain. They then dispersed, some to the morning meal, others to the 'groves and gardens' near the water side, and a few of the young writers to the teacher provided for them by the company. At ten business began, and went on till noon. Then dinner was served, all sitting down, after the English manner, in a public place, according to their seniority in the service. The table, spread at the company's expense, was adorned with drinking cups, dishes, and plates of pure silver, 'massy and substantial.' The dishes were filled with the choicest meat Surat or the country round could afford, prepared, to please 'the curiosity of every palate,' by an English, a Portuguese, and an Indian cook. With equal freedom generous Persian wine and arrack punch were served round the table. This was the everyday fare. But on Sundays and public festivals the table was 'still further embellished' by game, fruit, European wines, and English beer. The dinners usually ended with the loyal toast to the king and the company.[2] In the afternoon, about four o'clock, business was resumed, and was carried on till dark. Then, after prayers, at eight, a public supper and some 'innocent easy recreation,' all retired to their rooms, no one being allowed, without liberty of the president, 'to lie abroad or leave the factory'[3].

1. Fryer (1673) calls them 'noble rooms for council and entertainment.'- 84.

2. Referring to the variety of courses of the table Rawlinson says "when we hear that the meal sometimes ran to sixteen courses, we are able to understand the complaint that excessive indulgence in meat and alchohol, was responsible for many deaths and much more sickness." - British, Beginnings in Western India p 129.

3. Ovington 391-401 ; Fryer 83. The life of the English factors in Surat was not, however, always either so well regulated or so comfortable as Fryer (1673) and Ovington (1690) describe it. There are on record complaints of gambling (1686) and of drunkenness (1700). At one time (apparently about 1660) so displease were the home authorities with their servants' conduct in Surat that they issued orders that any one addicted to drunkenness, profane swearing, or uncleanness, was first to be admonished, then fitly punished, and, should the punishment prove insufficient was to be sent to England by the next ship. (Ovington, 406) Nor was the style of living always one of profuse comfort. Towards the close of the century, instead of the variety of dishes described by Ovington, only one joint of meat was placed before the company's servants. The younger members, finding no comfort in the factory, took to frequenting tavern and public houses. So great was the scandal that, in 1699, Sir John Gayer had to order the president (Mr. Colt) to provide proper suppers.—Anderson, 350.

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At times, from October to March, the summer season as it was then generally called, ships came and went from the Suwali roads near the mouth of the Tapi, and then during the hours of business, from ten to noon and again from four till dark, below stairs among the packers and warehouse-keepers, it was 'a mere 'Bilingsgate,' and all over the factory a 'continued hurly-burly.' Winter, or the rainy season, from June to October, was to many of the factory, a less busy time. Then their chief duty was to lay in a stock of cotton-yarn and keep the weavers at their work, so that the supply of cloth might be ready against the season of ships.[1] Even in the busy season, however, the members had their times of rest and holiday. Sent down to the roads at Suwali to meet the ships from Europe, a few days would often be passed pleasantly, hearing the news from England, enjoying the hospitality of the ships' captains, and finding some shooting in the country near Suwali.[2] In Surat 'on solemn days', after the mid-day banquet was over, the president generally invited the whole factory abroad 'to some pleasant garden' near the city,' where they sat 'shaded from the beams of the sun, and refreshed by the neighbourhood of ponds and waterworks.' Here they listened to music, shot at marks, and enjoyed the society of the ladies of the factory.[4] Besides the factory establishment of cooks, butlers, and menials, of whom 'every one according to his quality, had some to wait on him in his chamber and follow him out, the chaplain and members of Concil were supplied with four or five men to attend on their coach ; when the president moved, 'besides a noise of trumpets, there was a guard of English soldiers consist-

1. Ovington, 393.

2 Sometimes the president himself came down to meet the English ships When the captains (1638) learned the president was coming, they went ashore and paid their respects to him on the beach. The president made a short speech, calling on the captains to do their duty by the company when in India. Then he went on board one of the ships, when a salute of twelve guns was fired. The next two days were spent in the entertainments given by the captains to the president -Mandelslo, 63.

3. There was (1673) 'a good store of gardens' in Surat, the Queen's the 'biggest of all, though some private gardens were neater.' (Fryer, 104) The English garden near the Burhanpur gate (1626) had pretty walks, adorned with a variety of sweet flowers. (Herberts Travels, 44). Here the company had thirty-four shops, stables for horses, a summer-house, and several other convenient places, all firm buildings, worth Rs. 25,000. When the city wall was built (1664-1670) these buildings were broken down, and the garden spoiled. (Ham New Act., I., 208) There was also (1673) a sweet garden belonging to the Dutch, 'with arbours and beds after the European mods'—Fryer, 115.

4. When they first settled at Surat some of the English merchants were married. But Sir T. Roe, (1616) disapproved of the practice, telling Steele that his wife would 'cause many inconveniences, and that he must live frugally and like a merchant, and therefore send his wife home. "I likewise," he adds, "endeavoured to deal in the same way about Captain Towerson's wife." (In Kerr., IX., 356) De la Valle (1623), who had his wife with him could not go to the English factory because there was no lady among them. (Trav. I., 25). For many years after there would seem to have been no English ladies in Surat. Mandelslo (1638) supped with the English president, and three merchants met together to drink to the health of their wives in England. (Trav., 45). Then the only European ladies in Surat were the wives of the Dutch factors. Afterwards president Angier (1669-1677) suggested that the company's servants should be encouraged to marry and so, when Fryer (1673) and Ovington, (1690) were in Surat, several of the merchants had their wives living with them.

ing of a double file led by a serjeant, a body of forty moormen, and a flagman carrying St. George's colours, swallow-tailed, in silk fastened to a silver partizan.' On 'solemn days,' when they went in state to their garden parties, the English 'Lodge' passed through the heart of the city with still more show. On these occasions before the president were carried two large English ensigns ; then curious Persian or Arabian horses of state 'rich in their trappings ; ' then the captain of the peons himself on horseback, leading a band of forty or fifty attendants on foot ; then the council in large coaches drawn by stately oxen ; and last of all, the factors in coaches or upon horses with saddles of velvet richly embroidered, their headstalls, reigns, and croupers covered with solid wrought silver.'

English in Surat, 1684-1707.

Between 1616 and 1660, when no English ladies lived at the factory, it would seem to have been the common practice for Englishmen in Surat, especially when travelling through the country,[2] to dress in Indian fashion. But later on (1690) when many of the merchants had their wives living with them, it was usual for the English in Surat not only to wear European clothes but as far as possible to have them made according to the latest fashion. Fortunately the men found tailors in Surat, who could fashion their coats according to the prevailing mode in England,' and ladies found local artists able to contrive' their towering head-dresses with as much skill as if the head-dresses had been an Indian fashion, or as if the tailors themselves had been apprentices at the royal exchange.'[3]

In Surat, the early Europeans would seem to have lived on somewhat familiar terms with the citizens. According to Ovington their grand style of living made the Indian governors and other persons in high position value their friendship and 'place an honour on their intimacy and acquaintance.' The factors, too, were hospitable, entertaining Indians, at least Musalmans, at their own tables and in turn dining with them, 'imitating, when they did so, the customs of the east in laying round the banquet upon Persian carpets.'[4]

During the latter half of the seventeenth century the relations between the Dutch and the English were frequently marred by hostilities. As has already been pointed out the two nations were at war in the East in 1652 and 1664. This was followed by another Anglo-Dutch war (1672-74), the third during this period.

1. Ovington, 309, Fryer, 85-87.

2 Terry (1617) notices that Sir T. Roe and his suite were 'dressed in English habits, made as light and cool as possible. (205). Mandelslo (1638) mentions the surprise excited by his European dress ; for, he adds "to avoid dangers on the road, the Dutch and English dress after the fashion of the country." (69).

3. Ovington, 280. Occasionally Englishmen, even in Ovington's time, dressed in native fashion. When they did so, they 'complimented the Moors by adopting their style of dress.'— 314.

4. Ovington, 401.

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when the communications between the English at Surat and the new English settlement of Bombay were constantly threatened and three home bound English ships were captured in the Bay of Bengal. The Dutch had a recollection that it was their attacks on the Spanish-Portuguese monopoly which had opened the Indian trade to their rivals and this indeed added bitterness to their feelings. Such hostilities apart, their settlements in Surat and such other places where they had not taken up the responsibilities of sovereignty were by far the most profitable to them commercially and even during the later period (1683-1757) Surat, Bengal and Coromandel figure in the company's books with annual profits of hundreds of thousands of guilders each.'[1]

Dutch in Surat, 1658-1707.

As has been indicated above, during the greater part of these years at Surat the Dutch were the most successful of the European traders. In addition to their monopoly of the finer spices, by acquiring (1663) a hold on the Malabar coast, the Dutch gained command over the supply of pepper.[2] In 1668 the English recovered their position on the Malabar coast and competed more vigorously with the Dutch. But in the war with the English (1672-1674) the Dutch were able to do much harm to the English trade at Surat ;[3] and again, in 1682, by the capture of Bantam, they acquired the control of the Java pepper market. In 1684 they are mentioned 'as very firmly settled at Surat and strong in the Persian Gulf.[4] They benefited by the failure of the English attempt (1668-1690) to establish themselves as a military power at Bombay and in 1690 tried hard to gain the sole command of the trade to the Persian Gulf. In 1694-1695, on condition of obtaining a monopoly of the European trade with Surat and being freed from the payment of customs, they offered to guarantee the security of the pilgrim traffic between Surat and Mecca.[5] This offer was refused and in 1699 it was arranged that, with the English and French, the Dutch should be responsible for the suppression of piracies, taking the Red Sea under their special care.[6] But in the following year, disgusted with the conduct of the governor of Surat, the Dutch struck the flag on their house and sent their shipping to Batavia.[7] On

1. Cambridge History of India, Vol. V. p. 57.

2. Bruce's Annals, II., 158-163.

3. Bruce's Annals, II., 328-339.

4. Stavorinus, III., 112-113. Valentyn gives the following list of articles of Dutch trade with Surat: Imports—spices, including cloves, nutmeg, mace, cinnamon, pepper, camphor, and cardamums, copper in plates and bars, benezoin, gumlack, quicksilver, vermilion, aloos (succotromc), areca, sapan-wood, elephants, teeth, sandal-wood, woollen cloths, tin, lead in sheets, cowries, tea, china, sugar, coral in branches, radix china, abony. Exports—gold and silver allegars, common ditto broad and narrow chintzes, blue baftas of Ahmedabad, narrow white baftas of Broach, black fine baftas, broad white ditto, silk chindoes, black cannequins, white ditto, quilted cottons, nicanees, petolas, choutarees, deriabadys of Agra, mammudies of Talalpour, indigo from Agra, indigo chircees (Sirkhej) from Ahmedabad, candied mirabolans, *hing*, or assafoetida, rasmal, or borax, Malwa opium, Surat soap, red sealing-wax of Surat, cotton, cotton-yarn, wheat.

5. Bruce's Annals, III., 538-543.

6. Bruce's Annals, III., 189.

7. Bruce's Annals, III., 308.

the appointment of a fresh governor (1702) the Dutch would seem to have returned to Surat. But in 1703 their factors were again placed in confinement. In consequence of this insult the Dutch fleet in 1704 blockaded the mouth of the Tapi and though offered as much as £8,000 refused to withdraw unless they were declared free from any claim for damages. In the following year they made more prizes and again returning in October, 1706 continued the blockade till January 1707. The governor at last agreed to pay the Dutch a sum of £81,000 (Rs. 8,10,000) on giving up the ships they had seized, one per pent on the Surat customs was to be abated, and trade to Broach was declared free. At the same time liberty of trade was granted to the English.

During this time the staple of the Dutch trade with Surat and the chief source of their wealth was the import of spices. As the Dutch had a monopoly of this traffic, their profits were very high. From 1662-1670 the rate of profit on the finer spices is said, on an average, to have been about 520 per cent and from 1688-1698 it rose to 850 per cent. The trade in other merchandize at this time was said to yield a profit of about sixty per cent. The average income of the Dutch factory at Surat between 1662 and 1673 was from the finer spices alone about Rs. 3,04,150. The corresponding profits between 1688 and 1698 are returned at Rs. 6,95,810, of which Rs. 4,63,150 were derived from the finer spices, and Rs. 2,32,660 from their trade in other goods.[2]

According to the traveller Baldaeus who visited Surat about 1670, 'the lives of the meaner sort of the Dutch were at that time none of the best.' Heating themselves with arrack and other strong drink and then lying exposed in the open air, they often caught 'the cramps or other illness.' The better sort commonly rose with the sun, 'sleep after sunrise being accounted very unwholesome.' Some immediately after coming out of bed had the custom of washing their heads, nay the whole body, with cold water. Others washed with lukewarm water three or four times a week. "The last," he adds, "I have found the best by experience." Dinner was early apparently before mid-day. When dinner was over, it was usual to sleep ; then about three or four o'clock to drink tea ; and after tea, in the cool of the evening, to walk. They supped commonly about seven or eight o'clock, but very moderately, and went to sleep about ten or eleven, upon quilts, 'feather beds being not used in the Indies.' The ordinary food was goats, sheep, fowls, hares, peacocks, and such like. Besides the tea of which two kinds, Chinese and Japanese, were known and which had of late years 'gained a mightly ascendant' over the Hollanders coffee and chocolate were used. A common drink was a mixture of sugar and water boiled together.

1. Bruce's Annals, III., 275.
2. Stavorinus, III., 112, 113.
3. Churchill, III., 592.

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Of spirits brandy was, by the wiser sort, seldom taken, 'unless it was a spoonfool or so before dinner, or a drop at night before they go to bed.' Brunswick mum was, however, both more pleasant and more wholsesome than in Europe, 'the worst being that it was excessive dear.' Of wines those of Spain were most in request. French and Rhenish wines being not strong enough in hot countries 'where the stomach requires more lively cordials, as a little brandy or a moderate share of canary.'

French in Surat, 1642-1700.

The French settlement of 1642, of which mention has been made above, would seem to have been a failure. But a fresh attempt was made in 1664 on the occasion of the formation of Colbert's famous company of the East Indies. Taking Madagascar, which they then (1665, July 10th) called "Ile Dauphine', they in 1667 sent a group of men with Carron, a Dutchman, as agent, with the title of director, to settle a factory at Surat. Even before this, Beber who had been to Agra in September 1666 obtained a *farman* from Aurangzeb granting the French a site and factory at Suwali and permission to trade in the neighbouring town on the same terms as the Dutch and the English. Accordingly, Beber had so well prepared for the new arrivals that they were able to establish themselves at once. In 1668 (February 13th) French ships arrived and gave out that large consignments were on their way to Surat. But as no more ships came the Surat merchants would have no dealings with the French, and they were forced to retire to Madagascar Meanwhile at Madagascar so greatly were the company's affairs mismanaged that the king of France recalled the grant under which he had invested the company with the possession of the island. Under these circumstances the company in 1670 transferred their sovereign council to Surat, and in January 1671 gave its members full powers and criminal cases.[1] In 1670, on the occasion of one of the Maratha raids on Surat, the French are said to have saved their factory from plunder by compounding with Shivaji and furnishing his troops with the means of taking the Persian factory.[2] In 1672, the arrival of a strong French fleet, the "squadron of Persia" as it was called, under De la Haye in Indian waters raised the position of the French, and in the beginning of the following year (1673), on hearing that a Dutch squadron was menacing Bombay, Mr. Baron, the French director, with four ships, came from Surat to Bombay, and joining with the English, succeeded in defeating the designs of the Dutch.[3] Later on, the weavers of France raised objection to the importation of Indian cloth, and the trade of the French company at Surat fell very low. In 1692 a French fleet of four ships reached the Tapi with instructions to withdraw the factory from Surat. At this time (1692-1697) there was a war between

1. Milburn's Or. Com., I., 381, 382.
2. Bruce's Annals, II., 285.
1. Orme's Hist. Frag. 33.

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England and France and as the French succeeded in cupturing an English vessel near the Tapi, they were able to pay their debts and the factory was continued for some time longer. Gemelli Careri (1695) mentions houses of French merchants as among the best buildings in Surat,[1] and in 1699 the French were still of sufficient consequence at Surat to unite with the English and Dutch in becoming responsible for the suppression of piracy, and took the Persian Gulf as their special charge. The able handling of the French affairs by Martin, the chief officer in charge at Pondichery, was largely responsible for the strengthening of the French position there, as also for the vigorous activity at Surat, during this period. Unluckily this promising condition did not last. With the starting of the war of Spanish succession, trade was interrupted and the factories of Surat and Bengal fell back into inactivity.[2] Very soon after this they were forced to close their factory, their agents leaving Surat without meeting claims upon them. For the rest of this period, and for some years after (1719), from fear of being seized to pay the company's debts, no French ships visited Surat.[3]

Portuguese in Surat, 1658-1707.

Throughout this period Portuguese factory would seem to have been kept up in Surat. As late as 1670[4] the Portuguese granted passes to ships. In the same year a letter was written from the viceroy at Goa to the governor of Surat, asking that the customs duties might be reduced to two per cent. And about this time the English records make mention of a revival of the Portuguese trade at Surat,[5] and again in 1684 their competition is said to be serious.[6] In 1698 a scheme was started for establishing a Portuguese trading company, but with what success is not known. The head of the Portuguese factory, at this time (1695), would seem to have been styled chief captain.[7] Again, in 1700, the English trade is said to have been prosperous, partly owing to the absence of the Portuguese who, like the Dutch, would seem to have left Surat disgusted with the tyrannous conduct of the governor.[8]

Decay of imperial power, 1707-1733

The third period of Moghul rule at Surat extends over twenty-six years, from 1707, the year of Aurangzeb's death, to 1733 when, as governor of Surat, Teg-bakht Khan gained a position of practical independence. The chief influences affecting Surat during this period, were the failure of the authority of the

1. Churchill, IV., 188.

2. Cambridge History of India, Vol. V, p. 73.

3. Milburn's Or. Com., 385. Of the French Capuchin friars who, during the whole of this time were held in much respect in Surat, some details will be found below in the account of the city of Surat.

4. It was in this (1670) year that the town of Diu was sacked by Muscat Arabs.—Ham. New Act., I., 141.

5. Bruce's Annals, II., 342.

6. Bruce's Annals, II., 538.

7. Tirocinio Litterario, No. 8 of 1862.

8. Bruce's Annals, III., 334.

Court of Delhi and the establishment of Mahratta power up the walls of Surat. These two influences combined to weaken the hands of the governor of the city.[1] He could no longer look for support either directly from the court of Delhi or through their representative, the viceroy of Gujarat. At the same time, by the establishment of Maratha power in the districts round Surat, the city governor was deprived of the chief source of this revenue.With the decline of the governor's authority, the rich merchants of Surat and the chief companies of European settlers began to take a leading part in the history of the city.

During the early years of this period (1707-1717), the only event of importance was the construction of the outer row of city walls. This work, begun under the governorship of Haider Kuli Khan (1717-1719), was completed in 1720 by Haider's successor Tahavar Khan. In 1723 Rustam Ali, a Musalman soldier of distinction, was chosen governor of Surat. Acting with vigour against the Marathas, he succeeded in winning back from them the districts round the city. To revenge the death of his brother Shujaat Khan the deputy officer at Ahmedabad, Rustam in 1725 marched to Ahmedabad where, in an engagement with the Mahrattas, he was slain.[2] Rustam was in 1725 succeeded by his son Sohrab Khan. In the early years of his governorship Sohrab Khan, according to the account of the English factors, acted oppressively and by his exaction turned against himself many of the leading local merchants as well as the European settlers in Surat. The immediate cause of the disturbances, which beginning in 1729 lasted till the establishment of Teg-bakht Khan as governor of the city in 1733, was a certain Mulla Muhammad Ali. This man, who in 1719 succeeded to the fortune of his grandfather Mulla Abdul Jafar,[3] would

Mulla Muhammad Ali, 1729-1733

1. During this period the city governors of Surat were : Amanat Khan 1707 : Dayanat Khan, 1713 : Khaje abdul Hamid Khan 1714 , Mahatarim Khan 1714 . Momin Khan 1715 ; Syed Asslat Khan, 1716 : Haider Kuli Khan, 1717 : Tahavar Khan, 1719 ; Rustam Ali Khan, 1723 ; and Sohrab Khan, 1725 Teg-bakht Khan, 1731, died 1746.

2. Rustam Ali was slain in the battle of Arras on 21st February, 1725 (Irvin Later Mughal) II,176-183.

3. Abdul Jafar,an inhabitant of Patan, is said to have come to Surat in 1688 Starting in life as a poor man, he for a time taught in a school, and so, according to one account, was called the Mulla. (It seems more likely that he was called, Mulla, because he belonged to the sect of the Mulla, or Shia, Bohoras. See Ham. New Act, I , 151). After a time he took to trading and became very rich According to one story, the Mulla was on one occasion unfairly forced to take a cargo of spoiled goods. For a time he left the goods alone and when next he went to look at them, found diamonds and rubies instead of bad butter and damaged dates. Another version is that the Mulla for a long time supported a beggar and that, in return, the beggar gave him nineteen cocoanut full of dust This was to show that the Mulla would become the owner of nineteen ships. The omen was fulfilled ; and though the Mulla could never succeed in owning fleet of twenty ships he amassed so large a fortune that he died worth Rs. 85 lakhs. This fortune was seized (1718) by the governor of Surat, Haider Kuli Khan, on the ground that the Mulla had died childless. But the Mulla had a grandson, Muhammad Ali by name and he going to Delhi established his claim to his grandfather's estate and was presented by the emperor with valuable gifts. On his return to Surat he received his grandfather's fortune. His descendants still live in Surat, and are known as the *panchasi valas*, or the 'eighty-fivers'

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Muhammad
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seem to have continued trading at Surat for about ten years. In 1729, according to one account, anxious to establish himself in a position of independence and, according to another version, enraged at the exactions of Sohrab Khan, Mulla Muhammad attempted to make a settlement on the Island of Piram, near Gogo. Failing in this attempt, the Mulla next determined to establish himself at Athwa, a village on the Tapi about three miles below Surat. Here he began to build a fort. But before much progress had been made, the work was stopped by the orders of Sohrab Khan. Enraged at the interference of the governor, the Mulla turned to Begler Khan, the commandant of the castle. Working upon him by large presents and by the promise that he would use his influence to procure for Teg-bakht Khan, Begler Khan's brother, the office of governor of the city, he persuaded Begler Khan to bombard Sohrab Khan's residence. Worsted in the contest, Sohrab Khan agreed to refer the matter to the court of Delhi, allowing Teg-bakht Khan to act as governor of the city till the emperor's order should be received. On the success of his party, Mulla Muhammad again set to work building his fort at Athwa. But Teg-bakht Khan and his brother Begler Khan, no longer dependent on the Mulla's help, informed him that unless he obtained the special permission of the emperor the work must stop. Meanwhile from Delhi Sohrab Khan was confirmed in the governorship of the city and Muhammad, taking advantage of these orders, proposed to Sohorab that they should unite and deprive Teg-bakht Khan of his government. Sohrab Khan agreed, and Teg-bakht Khan was driven from office. The Mulla was now allowed to go on building his fort. When the work was finished he established himself at Athwa and at the expense of Surat, Athwa became a place of considerable trade. Sohrab Khan finding his customs revenue falling off ordered the Mulla to return to Surat. But Muhammad, winning over to his side the Dutch and English[1] as well as his old ally Begler Khan, the commandant of the fort, Sohrab Khan, finding himself without supporters, fled to Gogo. Begler Khan had agreed to join with the Mulla only on the condition that the Mulla would solemnly promise to help in establishing Teg-bakht Khan in the governorship of the city, and as the Dutch and English approved of this choice of a governor Teg-bakht Khan succeeded to Sohrab Khan's place (1731). Mulla Muhammad would seem for a time to have been allowed to remain at Athwa. But in the next year (1732), careless of his promise to Begler Khan, he, by sending valuable presents to Delhi, endeavoured to obtain the office of governor of the city for his own son.

Teg-bakht Khan, coming to know of Muhammad's intrigues, invited the Mulla to an entertainment and placing him under arrest kept him a prisoner till his death in 1734. On getting

1. In Musalman histories no mention is made of the help given by the Europeans. But the English gave valuable support, sending from Bombay troops to guard the factory and ships to watch the river and supplying Teg-bakht Khan with funds.—Surat diary quoted in Bombay Quarterly Review IV, 185.

the Mulla into his power, Teg-bakht Khan took and dismantled the fort at Athwa.[1]

When news of the disturbances at Surat reached the court of Delhi, orders were issued transferring Momin Khan from Cambay to Surat and appointing Teg-bakht Khan to be govenor of Cambay. Momin Khan sent Syed Nurullah to act for him but he was defeated by Teg-bakht Khan, who continued in the governorship at Surat. In the following year, in spite of his disregard of their orders, by presenting them with valuable gifts, Teg-bakht Khan induced the Delhi court to confirm him as governor of Surat and confer upon him the title of Bahadur. During this time, in spite of disorders, trade would not seem to have suffered. Besides the extreme case of Muhammad Ali, many of the Surat merchants, both Muhammadans and Hindus, were at this time very rich.[2] The Parsis were also a large and

1. The account of these disorders is taken from Munshi Abdul Hakim's history. In almost all points it agrees with the particulars given in the Surat Diaries Bom. Quar., Rev., 184-185.

2. Of these perhaps the most prominent character is a c[illegible]ain Ahmad Chalebi, an 'artful Arab merchant,' who played an important part in the negotiations for the transfer of the fleet subsidy to the English (see below, p 105). This man at first was, or at least was believed to be, a strong supportrer of the English claims After-wards, in 1733, in union with a young Parsi broker named Manckji Navroji, he did his utmost to widen the breach between the goveror Teg-bakht Khan and the English He continued a staunch supporter of the governor till August 2, 1735, when Teg-bakht Khan at length discovered that he had been made a dupe of by Chalebi. In reply to the governor's remonstrance, Chalebi simply defied is power, and so puffed up was he by his wealth and importance that taking soldiers into his pay, he was actually preparing to levy war upon the government Before matters came to a crisis, however, his supporters began to desert him, and on the 12th July, 1736 he was assasinated in his own house. (Surat Diary, 1732-1735 ; Bom., Quar., Rev., IV., 203). According to Munshi Abdul Hakim's history of Surat, Teg-bakht Khan, with his own hand, assassinated Chalebi.

Another Surat merchant, the details of whose life occupy a large place in the records of this period, is a Hindu, Jagannath Laldas, by name. This man was the English Company's broker and belonged to a family which had been in their service for four generations and had enjoyed much of their master's confidence His chequered and adventurous life proves that his mind was shrewd, vigorous, and fertile of re-sources, that he had courage and firmness even to obstinacy ; and that he was at least as honest as those by whom he was surrounded. The opinions of him enter-tained by his contemporaries were curiously conflicting The company's servants could not say enough for him at one time. At another they could not say enough against him He began by gaining their confidence, was then treated by them as a scoundrel who would cheat his own father But again, recovering their favour, held one of the most responsible situation in Bombay, and died at Surat after he had received abundant tokens of their esteem. Jagannath's difficulties began with the exposure of the English factor's frauds in 1736. At that time he was indebted to the company in the sum of Rs. 4,00,000 and as he failed to provide securities for the payment of this debt, he and his brother were confined in the English factory at Surat. As the governor refused to force him to pay his debts, Jagannath was carried a pri-soner to Bombay and his brother Govinddas was for three years detained a prisoner, in the English factory at Surat. After Jagannath had been in Bombay for some time he persuaded the authorities in Bombay to let him return to Surat to make some settlement of his debts with his brother's help. He was allowed to go to the mouth of the Tapi, but, in spite of the precautions taken, effected his escape in April, 1738. On regaining his liberty, he hastened to the Maratha camp, where he was well received, taken into service and entrusted with an important military command, the duties of which he discharged efficiently. (This episode in Jagannath's life is interesting, as showing that among the Wanias centuries of trading had not deprived them all of that capacity for military affairs which in the times of the ancient Hindu rule had made men of this caste among the greatest commanders of the Anhilwara (942-1298) kings. Still he looked back to the situation he had lost, and

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prosperous class, "good carpenters and ship-builders, and exquisite weavers and embroiderers."[3]

During this period the city of Surat continued to increase in size. Taking advantage of the protection of the new walls, Kaji Mir Fatullah Khan, in the year 1725, settled the suburb of Makdumpura near the Athwa gate. Two years afterwards a flood in the Tapi caused much damage at Surat. On this occasion the water rose so high in the city that people were forced to take shelter on trees and on the tops of houses. In the general distress the governor Sohrab Khan acted with liberality, distributing food to large numbers, both Hindus and Musalmans. 1732 was a year of famine.

Europeans in Surat, 1707-1733

The beginning of the eighteenth century was a transition stage in the fortunes of the leading European settlements at Surat. On the one hand, in a struggle between local merchants and impoverished governors, their command of men and money made their friendship important. On the other hand, neither Dutch nor English aimed as yet at ruling in Surat. Their interest in the struggle was the same. The trade of both had lately suffered from the same acts of tyranny and both were anxious to establish some one in power who, owing his position to their help, might in his management of the city be expected to consult their interests. At the close of the struggle in 1733, the Dutch and English together recovered, with thankful hearts, the charges incurred in helping the cause of their ally Teg-bakht Khan. In settling the accounts they lament 'the troubles and fatigues they had undergone in the long scene of confusion in the city.' They hope 'that it may never again fall to their lot or to the lot of their successors to disfigure their account books with the head of war charges.[1]

English in Surat 1707-1733

For the English company, well provided with funds and protected in its monopoly this was on the whole a time of

was ever anxious to make terms with his old masters. After some negotiations with British officers, it was, agreed, in April 1742 that in lieu of the original sum a composition of £10,000 payable in a eight yearly instalments, should be accepted by the company. Jagannath then returned to Bombay and so rapidly worked himself into the favour of his employers that in 1747, when 3,000 native soldiers had to be enlisted, he was appointed to their command and so meritorious were his services then considered that they were formally acknowledged by the president in council. He was afterwards engaged in extensive dealings with the factory at Surat. Finally he was reinstated as English broker and lived to see his English patrons gain command of the Surat Castle. He died in 1761 and was succeeded by his son. (Outward letters of the Bombay Government, dated 3rd February 1747, 23rd November, 1748. Diary of the Surat Factory, 5th March 1748, 10th May, 1751. Diary of the Bombay Government, No. 1764.—Bom. Quar. Rev. IV., 210-216

3. Ham New, Act,. I., 161.

1. Extract from the Surat Diary quoted in Bom. Quar. Rev. IV., 185. Parsons (1777) says that in 1734 the English became masters of Surat by conquest, and continued in command till 1739.—Parsons' Travels. 247. This statement would seem to be incorrect.

prosperous trade,[1] the factory at Surat was subjected to so much annoyance and so many exactions at the hands of the city governor that in 1712, the English withdrew from Surat.[2] For three years their factory was closed. Then an embassy from Hugli, backed by magnificient presents and the surgical skill of Mr. Hamilton,[3] exercised so favourable an influence on the court of Delhi, that the emperor not only granted the privilege the company required in Bengal but also prohibited the governor of Surat and the viceroy of the Deccan from placing impediments in the way of English trade. In 1716 (January 6th) a fresh charter was obtained, under the terms of which all duties on the company's imported goods were commuted for an anual tribute of Rs. 10,000 and they were allowed to establish a separate custom-house. At the same time about fifteen acres of land were granted wherever they might choose to build a factory and it was agreed that all English wrecks should be protected from plunder and from exorbitant demands for salvage. In 1716 the English returned to Surat. But within a few years a renewal of attempts to make the English responsible for piracies committed by other nations led to fresh insults. First, the English chief was told that the factory had been bestowed on a Musalman saint and that it would, therefore, be necessary for the factors to change their abode. At the same time they were given to understand that the evil might be averted by a present judiciously made to the governor, who would then exercise his powerful influence on their behalf at the Delhi court. The English chief agreed to pay a small sum, threatening at the same time that if the English were dislodged from their factory, they would at once withdraw from Surat and take their revenge on the trade of the port. Very soon after, a rumour reached the city that much damage had been done to Surat shipping in the Red Sea by an European vessel. The governor of Surat demanded restitution from the English for their losses and the Musalman merchants thronged the gate of the English factory with tumult and violence. The company's broker was assaulted and placed in confinement and a guard stationed over the factory. Then the head of the English factory, feeling that the moment for reprisals had arrived, ordered the cruisers at the bar to lay an embargo upon all ships belonging to Musalmans. Matters were not, however, pushed to an extremity. The governor engaged that the factors should not be again molested. The factors on their side bound themselves to make restitution when any acts of piracy were proved against them. Troubles were again renewed when in 1723 Rustam Ali Khan was appointed to the charge of the city. During the two years of his rule (1723-1725), this governor oppressed all merchants

1. In 1716 a proclamation was issued, and in 1718, an Act (5th of Geo. I., Chap. 29) was passed for the better security of the Company's trade to India. Milburn's Or. I., XLVI.

2. The rest of this paragraph is condensed from the Bombay Quarterly Review, III, 69-73.

3. The story that the concessions were granted as a reward for Hamilton's assistance is one that will not stand examination. Cabmbridge History of India, Vol. V, pp. 111-112.

who dealt with the English. At the same time a change in England did much to destroy the value of the company's trade to Gujarat. The opposition to the importation of Indian goods into England seemed to die away at the close of the seventeenth century. The use of Indian calicoes, both for wear and for household furniture, was again for a time universal. But in 1721, in consequence of riots and tumults among the weavers of London, an Act was passsed absolutely prohibiting the wear of Indian calicoes.[1] By the next governor, Sohrab Khan, English trade was at first obstructed. Afterwards, for a time, he ruled with more justice and ordered their wrongs to be redressed. But before many years were over, Sohrab Khan again returned to a course of oppression. In 1730 he seized and imprisoned several of the principal merchants, bankers, and brokers, so that a stop was put to all business until he was brought to his senses by a remonstrance of the united English, French, and Dutch factors. Still he insulted and injured the Indian merchants who withdrew from the city, leaving the governor in great need of money. Sohrab then the implored the English to pay their annual tribute or *peshcush* of Rs. 10,000 in advance. This they agreed to do. and afterwards the governor was able to raise form the English and Dutch brokers a further sum of £21,000 (Rs. 2,10,000). But this large sum of money was extracted from the brokers without the consent of their principals, and this act of extortion was one of the reasons that induced the English and Dutch shortly after to join in the combination against Sohrab Khan which ended in Sohrab's flight and the accession of Teg-bakht Khan.

The articles of trade imported and exported by the English at this time differed but little from those in which they formerly dealt. Of imports, there were bullion, lead, quicksilver, woollen-cloth, and hardware. The exports were chiefly cotton cloth, diamonds, pepper, drugs and saltpetre. One of the chief changes was that in the disordered state of the country Europeans were not allowed to visit the interior without special permission, so that the disposal of goods was for the most part left to Indian dealers.[1]

Dutch in Surat, 1707-1733.

During this period the Dutch would seem to have maintained their position of consequence among the foreign residents at Surat. In addition to the privileges conferred upon them at the close of the last period, the Dutch in 1709 obtained a charter determining, among other points, that 'according to ancient customs, a place in the city should be granted to the Dutch East India Company for their use in carrying on their trade, and likewise another for the residence of the chief within the city or in the garden.'[2] Again in 1712, it was provided that the house of

1. Milburn's Or. Com., I., XLVII.

1. Anderson's English in Western India, 380.

2. Quoted in Stavorinus' Voyages, III., 93, 94.

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Itabar Khan should be given to the company's servants for their residence for ever, upon the condition that no angles or enclosures should be made to it nor any great or small guns conveyed into it. Under the terms of a charter obtained in the year 1729, the director of Surat was allowed to purchase for his own use ground in the Jahangir Bandar within the outer walls of the city of Surat by the river side, and to erect buildings upon it for the housing of merchandize.[3]

Portuguese in Surat, 1707-1733

In the early years of the eighteenth century the Portuguese, by their victories over the Muscat Arabs in 1704 and in 1713, are said to have improved their position in Surat. In 1714 the viceroy entered into negotiations with the emperor and by the help of Donna Juliana, a Portuguese lady then an inmate of the Moghul's harem, obtained a charter under the terms of which the duties charged on the Portuguese were reduced to two and a half per cent and their enemies, the Muscat Arabs, forbidden to come to Surat.[1] In 1731 a Portuguese company was formed for trading to the Indies and one ship was despatched to Surat. The experiment is said to have been attended with but little success.[2]

French in Surat 1707-1733

In the first eighteen years of the eighteenth century the French had no connection with Surat. But in 1719 a new French United East India Company was formed and for some years traded with Surat with success.[3]

Austrians in Surat, 1707-1733

A fresh company of European traders visited Surat during this period. This was the Ostend company which started in 1717 under the protection of the emperor of Austria. In 1719 this company sent a ship to trade at Surat.[4] The heads of the Dutch and English factories joined in doing 'all disservice possible' to the people of this ship. But the deputy governor of the city favoured them and two more ships that arrived in 1719 would seem to have been allowed to trade without disturbance. Later on opposition revived and in 1727 rose to such a height that the Austrian emperor was forced to suspend the Ostend company's charter.[5]

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3. This is the Walanda Bandar, or Dutch wharf, immediately above the present commodore's *bungalo*. The commodore's *bungalo* was then a garden house connected with the English factory. Details of each of these charters will be found in Stavorinus' Voyages, III., 92-100.

1. Letter of the viceroy of Goa to the nawab of Surat, dated 30th November, 1715.

2. Milburn's Or. Com., I., 308-310.

3. Milburn's Or. Com., I., 384.

4. Macpherson, 295.

5. Milburn's Or. Com., I., XLVII and 411. Their charter would seem to have been suspended only for a time. As late as 1743, the court of directors warned the factors at Surat to be on their guard against the ships of the Ostend company. ombay Quarterly Review, III, 31.

Independent Governors.

Independent governors, 1733-1759.

During the 26 years between the accession of Teg-bakht Khan in 1733 and the capture of Surat by the English in 1759, the governors of Surat were practically independent. This period of 26 years may be divided into two parts, each of 13 years, the first during which Teg-bakht Khan maintained an unbroken control over the city; the second, after Teg-bakht Khan's death a time of disorder and disputed succession.

Teg-bakht Khan, 1733-1746.

Though Teg-bakht Khan went through the form of appointment by the Delhi court, he was from the first independent. The old division of power in Surat between the governor of the town and the commandant of the castle had now ceased. The whole control of Surat affairs was in the hands of the two brothers, Teg-bakht Khan the governor of the city, and Begler Khan the commandant of the castle. Under these circumstances, as city governor, Teg-bakht Khan discarded the old designation of *mutsadi*, or clerk of the crown and adopted in its stead the higher title of *viceroy*, or nawab. At the same time, to increase the importance of his own position, he established a new officer, a *naib* or deputy *nawab* and entrusted him with police and other functions. To this office Teg-bakht Khan appointed his third brother, Ghulam Mahmud, afterwards known as Safdar Khan. On his succession to power, Teg-bakht Khan found his revenue insufficient for his wants. To improve the state of his finances he adopted three courses : (i) he made an arrangement with the Mahrathas for a share in the revenue derived from the lands once under Surat ; (ii) he attempted to evade the payment of his £30,000 subsidy to the Siddi admiral of the fleet ; (iii) he imposed new taxes on the trade of Surat. (1) With regard to his relations with the Mahrathas Teb-bakht Khan found that though they had been driven by Rustam Ali (1723-1725) from the distritcts round Surat, the Mahrathas had during the disorders of Sohrab Khan's governorship recovered their former hold and where again in possession of the country up to the walls of the city. Teg-bakht Khan was not in a position to oust the Mahrathas from these lands; at the same time he was not inclined to give up the whole territorial revenue without a struggle. He accordingly entered into negotiations with Damaji Gaekwar, and an agreement was concluded under which, on the promise of a yearly assignment of £23,600 (Rs. 2,36,000) in his favour, Teg-bakht Khan engaged to allow the Mahrathas to hold the lands round Surat and collect the revenues from them [1] (2) In his attempt to keep back for himself part of the subsidy due to the admiral of the Moghul fleet, Teg-bakht Khan was helped by a contest between the English and the Sidhi for the post of admiral. Since the beginning of Aurangzeb's reign (1661) this office had been held by the Siddis of Janjira. But of late years the power of the Siddis had declined. Their fleet had shown itself no match for

1. Surat Papers, 359. The records referred to are collected in a volume published in 1806 with the title 'Papers on East India Affairs.'

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the Mahratha fleets and they were now, even by their own confession, unable to protect the shipping of Surat.[2] Under these circumstances, the English endeavoured to obtain for themselves the position and revenues of admirals at Surat. But as the Siddi was their ally and an ally whom in the growing power of the Mahrathas they could ill-afford to offend, the English were unwilling to attempt to gain the position by force. They had to content themselves with granting passes to traders,[1] with making an expedition against the Koli pirates of Sultanpur,[2] and with using every effort to induce Teg-bakht Khan to transfer the fleet subsidy from the Sidhi to the English. Teg-bakht Khan, who had owed much of his success in the late struggles to the English, was at first anxious to please them. But as he found himself more firmly established in his government, his tone by degrees changed. So long as the post of admiral was held by a weak chief, Teg-bakht Khan, was able to keep back for his own use a considerable share of the fleet subsidy. But if the English were appointed to the charge of the fleet, their power at sea was sufficient to force Teg-bakht Khan to pay them the full amount of the admiral's stipend. Influenced by these motives, Teg-bakht Khan, after long negotiations, refused to favour English claims to the admiralty of the fleet.[3] (3) In 1735, in addition to the existing custom dues, Teg-bakht Khan, besides introducing a tax on trades and professions, imposed new duties on all goods passing through Surat.[4] These new taxes yielded a very large revenue and Teg-bakht Khan was able not only to live in a style of great magnificence but to amass so large a fortune that after his death several members of his family were rich enough to engage troops and struggle for the office of governor of the city.

Struggle with the English, 1733-1735

The failure of the negotiations on the subject of the fleet subsidy (1733) caused a mutual dislike in the minds of Teg-bakht Khan and the English. The governor ill-treated some of the English dependents at Surat and as no redress could be obtained the English chief and his friends, leaving Surat, remained on board their ships at the mouth of the Tapi. Refusing several

2. Bom. Quar. Rev., IV., 192.

1. Under an order of the president in council, dated April, 1734, passes were granted in the following form : To all commanders of ships subject to the king of Britain. ...These presents are to certify at the request of inhabitant of and owner of... ..burthen.. . . *candis*. Whereof goes .. with . guns, laden with ......and bound to.....That in consideration of the friendship between our respective governments, I, James Hope, Esq., chief for affairs of the British nation in Surat, do require all subjects navigating under the protection of the Honourable East India Company that may meet with the said in her intended voyage not to give her the least hindrance or molestation, which certificate is to be in full force during the term of.. ...months and no longer. Given under my hand in Surat. ....this.... day of.......—Bom. Quar. Rev, IV., 188.

2. Bom. Quar. Rev. IV., 99.

3. The negotiations lasted from June 7th to July 31st, 1733—Bom. Quar. Rev., IV., 193.

4. Details of these taxes and of the special one per cent or *ekotra*, war cess levied will be found below p. 115.

invitations to land, they drew up a formal statement of their grievances, demanding redress, and in case of refusal, threatening reprisals on the trade of Surat.[1] In this struggle with Teg-bakht Khan, besides the support of the other European settlers in Surat, the English received from Damaji Gaekwar offers of help and from many of the people of Surat assurances that if necessary they were ready to leave Surat and seek protection under the English in Bombay. The English, however, refused the Mahratha offer of help, contenting themselves with showing their power by driving off a fleet of the Siddis sent to act againt them and establishing a blockade at the mouth of the Tapi. In Surat the price of provisions rose forty per cent and so great was the discontent in the city that Teg-bakht Khan was forced to agree to all the English demands. In February 1735 the guards were removed from their stations over the English factory and the Indian merchants and brokers were told that they were again free to trade with the English.

Struggle with the Sidhi, 1735-1736.

Teg-bakht Khan's next struggle was with the Siddi. Always anxious to increase his wealth, he thought that he might take advantage of the Siddi's weakness to keep for himself the whole of the fleet subsidy. Siddi Saut, the head of the family, failing in his efforts to obtain a share of the subsidy by peaceable means, collected a fleet and seized several ships at the mouth of the Tapi. The English were called in to mediate, and in August 1735 Teg-bakht Khan engaged to pay the Siddi Rs. 2,40,000 for arrears of subsidy and Rs. 1,50,000 for the current year. But reluctant to part with his money, Teg-bakht Khan broke his engagement and Siddi Masud, the Siddi's agent at Surat, again interrupting the trade, raised his demands to Rs. 9,00,000. A second time the helpless governor craved the assistance of the English. But they refused to interfere. Teg-bakht Khan was, therefore, left to make his own arrangements, and after some difficulty, in February 1736, he succeeded by making certain concessions in inducing the Siddi to restore all the ships he had taken. During the last ten years (1736-1746) of Teg-bakht Khan's governorship, his relations with the English were little altered. At times he treated their dependents with violence and injustice and refused, as long as he could, to pay off his debts to the company.[2]

Teg-bakhat Khan, 1733-1746

1. Their chief demands were : (i) that they should be protected according to the terms of their charter (1716) (ii) that a debt, owing by the governor, should be paid ; (iii) that their boats should not be molested ; and (iv) that, their dependents in Surat should be compensated for the ill-treatment they had received.-Bom. Quar. Rev., IV., 97.

1. It would seem to have been on this occasion that Teg-bakht Khan, in lieu of the original subsidy assigned the Sidhi, (i) one-third of the customs by sea and land ; (ii) one-third of the proceeds of the mint ; (iii) an allotment from the cotton and other funds ; (iv) the revenue of the Balsar division ; (v) certain dues from Bhaunagar in Kathiawar ; and (vi) one-third share of the tolls on grain.

2. In 1739, on account of the tyrannour behaviour of Teg-bakht Khan, the governor of Bombay again sent a naval force to the Tapi.—Bom. Quar. Rev., IV., 208 ; Surat Diary, 16th March 1741.

The last five years of Teg-bakhat Khan's rule in Surat were 'disturbed by threats of invasion, wild tumults of lawless Abyssinians, groans of impoverished merchants, and remonstrances of injured Europeans.' Invasion was threatened by Nasir Jang who, rising in rebellion against his father Nizam-ul-Mulk, would, it was supposed, march on Ahmedabad, and on his way plunder Surat. Teg-bakht Khan ordered the walls of Surat to be repaired, and suspecting that the European factors secretly favoured the enemy, invited the English chief and council to explain their grievances.[1] The danger of invasion for the time passed away as Nasir Jang was defeated and made prisoner by his father. But again (1742) before two years were over Nasir Jang, in arms against his father, appointed a supporter of his, Aziz Khan by name, governor of Gujarat with authority over Surat. Aziz Khan had also obtained an imperial order confirming his appointment[2] and was marching against Surat. The trees and hedges near the city walls were cut down, and it was with difficulty that the English prevented their tombs from being levelled to the ground. On the nearer approach of Aziz Khan, Teg-bakht Khan acted with vigour, forcing the Europeans to promise to support him and oppose the invaders and taking precautions that at least no communications should pass between the Europeans and his enemies. So, when the invading army advanced within four miles of the city, their leader, finding that his friends in Surat were either unable or unwilling to open the gates of the city, was compelled to make a flank movement and retreat. All fear from further invasion from this quarter was soon removed. For the Mahrattas under Devaji and Khanderav following the retreating Musalmans, on the 27th December, 1743 forced them to give battle at Piraval, thirty-six miles north of Surat where they were thoroughly routed, their leaders Aziz Khan and Fate Sab Khan being pursued as far as the Narmada and slain.[1]

Shortly after this (1743) Teg-bakht Khan, desirous to be free from the cares of government, entrusted to his brother Safdar Khan, formerly his *naib* or deputy, all the executive power. This change does not seem to have improved the position of the English. One of the first acts of the new governor was to seize an Indian merchant in English employ and refuse to pay any attention to the remonstrances of the English chief and council. This was followed in 1745 by an attack upon three of

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1. The English chief, when questioned by Teg-bakht Khan, denied that he had any communication with Nasir Jang. But, soon afterwards, hearing that a messenger from Nasir Jang was returning to his master with letters and presents from the French and Dutch chiefs, he and his council resolved to send a present worth from Rs. 4,000 to Rs. 5,000 hoping, as stated in the diary, that in case Nasir Jang should take the city in his way, he might be satisfied of the respect we had for him.--Bom. Quar. Rev. IV., 222.

2. He got this appointment by a forged document. Gaikwads of Baroda Volume I, p. 48, note 2.

1. Gaikwads of Baroda Volume I page 48 also Bombay Gazetteer Volume I Part I—History of Gujarat page 328, but in the former Aziz Khan is mentioned by his title Muckboul Alum.

the English factors, one of whom had in self-defence shot at but missed a dangerous dog. After firing the shot the factors were waylaid by thirty of the Governor's retainers and so badly beaten that the lives of all three were in danger. In spite of promises, no redress for this outrage was given. In the following year (1746, August 28th) Teg-bakht Khan died of dysentery at the age of eighty. 'The common people deeply bewailed the loss of a ruler who had treated them with singular indulgence and for the greater part of his life spent freely amongst them the sums he had exacted by violence from the rich. His love of magnificence, and a certain jovial humour excused his crimes and long after his death men pointed with admiration to the imposing palace he had built and the garden he had laid out at cost of Rs. 5,00,000.'

Europeans in Surat 1733-1747

As regards the position of the European settlers at Surat under Teg-bakht Khan, it will be seen from the details given above that none of them had as yet made any attempt to obtain a share in the government of the city. By the active help they had brought to their ally Teg-bakht Khan in 1731, the English had gained the highest position among the Europeans in Surat ; and in spite of the failure of their attempt to procure the admiralty of the fleet, they forced Teg-bakht Khan to observe their charter privileges and to refrain from injuring their dependents. The trade of the factory would seem on the whole to have been prosperous. In 1741 the factors wrote, 'our business goes on without impediment and we hope it will not be otherwise, as we shall only confine ourselves to our own sphere and not the least interfere with any transactions relative to government further than supporting your honour's privileges when called in question.'[1]

But though outwardly this was a time of considerable prosperity, the interest of the English company suffered much by the dishonesty of their servants. About 1736, when Lowther was the chief at Surat, the Bombay Government, suspecting that all was not right in his management of affairs, determined to send Mr. Braddyl, one of their council, to Surat with the temporary title of 'supervisor of English trade' and with authority to suspend Lowther from office. Lowther was at first blustering, insolent, and abusive. But finding resistance vain, he resigned his post and on the 19th February 1736 delivered over charge of the factory to his second in Council, Mr. Hope. The membrs of council would give no information against their chief. But from Indian sources sufficient evidence was in a few days collected to make out a case against Lowther. It was proved from his own books that he had made false entries in the accounts of his private trade as also, with Robinson's assistance, in the books of the factory. The case against him and his friends was so clear that at last they lost heart, and instead of repairing to Bombay, according to the president's order, secretly absconded

1. Bom. Quar. Rev. IV., 220.

to Madras where they remained in concealment for a short time and then made the best of their way to England. This conspiracy was general. All the senior factors were guilty of connivance, most of participation. The court of directors, therefore, ordered that Henry Lowther, James Hope, John Robinson, Daniel Innes, James Ramsden, and Daniel Taudin, should be dismissed from service, although they afterwards allowed Hope and Taudin to return. Lambton, who had been before suspended from the service and again restored, was appointed chief at Surat. But the characters of the company's servants at this time were so equivocal that their tenure of office was very uncertain. Lambton was in his turn accused of having purloined some jewels which had been deposited with him in pledge and so disingenuous were his replies to the questions addressed to him on the subject that the government were strongly convinced of his guilt. On this and other accounts he was, in 1739, dismissed from service. In consequence of these irregularities the court of directors passed a standing order that for the future their money should be kept in a chest with three locks; that the chief and the two next members of council should each have a key; that every month the cash should be counted in the presence of the whole council and the balance regularly entered in the official books of the establishment.[1]

The Dutch.

With the Dutch the period of Teg-bakht Khan's rule would seem to have been a time of depression. In public matters they played a part subordinate to the English. At the same time their trade was failing. In virtue of their command of the supply of spices, they were able to maintain extremely high rates of profit. But so greatly had the demand fallen off that in 1740' the real average annual money gain scarcely came to one-fifth part of their former profits.'[2]

During the latter part of this period the Dutch company would seem to have been but little more fortunate than the English in the conduct of its servants. Soon after Lowthrer had been ejected (1736) for his defalcations in the English factory, the Dutch discovered that their director, Mynheer Phonsen, owed Rs. 1,35,000 to the company, which he had no means of paying. At first he was permitted to resign quietly. But as he was afterwards suspected of having concealed his property he was expelled and died soon after under the protection of the English. Still worse were the distractions of the Dutch in Surat four years after (1740), when Mynheer Van den Laer, a member of the council, was accused of fraud by the secretary, and absconded. Two months later Mynheer Van den Berg, chief of affairs for

1. Surat Diary of 16th March 1741.—Bom. Quar. Rev. IV., 206-210.

2. Stavorinus, III., 113. The rate of profit on the finer spices is said at this time to have been as high as 2,400 per cent. But the falling off in the consumption of spices at this time, both in Asia and Euorpe, would seem to have been due to other causes than the high prices charged by the Dutch.—Macpherson, 103.

Mocha, also fled from justice, and sought refuge with the English factors at Surat. The English refused to give him up, and within three months more the director of the Surat factory was expelled by his subordinates. In connection with these misdeeds of their servants, the Dutch factors complained bitterly of the conduct of the English receiving with open arms their criminals and deserters.[1]

The French.

In the struggle at Surat, the French and Portuguese took no active part. With their conquests on the Madras coast, the importance of the French factory at Surat would seem to have declined.[2]

Surat, Factions, 1746-1759.

The chief events in the faction fights in Surat betweeen the death of Teg-bakht Khan (1746) and the capture of Surat by the English (1759) were : 1747, the succession of Safdar Khan, brother of Teg-bakht Khan, to be governor of the city, and of Wakhar Khan, son of Safdar Khan, to be commandant of the castle ; 1748, the defeat of Safdar and Vakhar Khan by Mia Achan, son -in-law to Teg-bakht Khan ; 1751, the defeat of Mia Achan; Siddi Masud gains command of the castle, Safdar Khan returns as governor of the city ; 1757, Safdar Khan is succeeded by Faris Khan ; 1758, Mia Achan returns and defeats Faris Khan ; 1759, the English capture Surat Two points deserve notice in these struggles ; (i) that (1747) the Mahrattas acquired a share in the city revenues ; and (ii) that the English and the Dutch, with the object of gaining a position of command in the city fought against each other as partisans of the rival candidates

Begler Khan, 1746-1747.

On the death of Teg-bakht Khan, his second brother, Begler or Azarat Khan, the governor of the castle, seized the reins of office, though professing to remain in power only until the emperor's pleasure should be kown. Begler's tenure of power was brief. He also having reached the age of eighty, died early in the following year (1747, February). On Begler's death he was succeded by the third brother, Safdar Khan.

Safdar Khan, 1747

On entering upon office as governor of the city, Safdar Khan appointed his son, Wakhar Khan, to command the castle But among the other members of the family who had received a share of the late Teg-bakht Khan's fortune, was a certain Syed Mia Achan, or Mia-ud-din Khan, who had married the daughter of Teg-bakht Khan. This Syed had the support of his wife's mother, a rich and ambitious woman, and with the help of her partisans, and of one Ali Newaz Khan, a relation of his own, was able to collect a party strong enough to win for himself

1. Surat Diary, 1735 and 1736, and 13th October 1742. Court's Letters, dated 5th October 1737, and 18th March 1743 ; and Consultation Book, 19th January 1746.- Quoted in Bom. Quar. Rev. IV., 206-120.

2. In a list of the French possessions in India (1744) no mention is made of the factory at Surat.– Milburn's Or. Com., I., 390.

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command of the castle and drive out Wakhar Khan. Not content with the command of the castle, Mia Achan determined, if possible, to oust Safdar Khan from the government of the city. With this object, he entered into negotiations with Damaji Gaekwad, engaging, if his attempt succeeded, to give Damaji Gaekwad one-fourth share of the revenues of Surat. The Mahrattas agreeing to this proposal, Safdar Khan was defeated and fled to Tatha in Sind.

Mia Achan, 1748-1751.

The issue of the first of the contests (1748) among the members of the family of Teg-bakht Khan was, therefore, to unite in the hands of Mia Achan the command both of the city and of the castle. The accounts of travellers who visited Surat about this time would seem to show that these struggles were little more than street fights. Each[1] of the rivals raised as many troops as he could. With these he cantoned and intrenched himself in his houses and gardens and from time to time endeavoured to surprise or drive away his opponents. During these hostile operations, which were not attended with any great loss of life, the inhabitants were content with shutting the gates of the town nearest to the scene of action and continued to go about their ordinary affairs without fear of being pillaged. Nay, they were sure of receiving compensation whenever any chance injury was done. Trade suffered no interruption.

English and Dutch 1748-1751.

As was the case in 1731, the English and Dutch took an active part in the struggle for succession. But on this occassion they no longer acted together but became partisans of the rival competitors. Each of them not only furnished his ally with ammunition and funds but entrenching themselves in their factories, they fought against each other, though they were not openly at war. In the state of parties as they stood in 1748, when Safdar Khan was expelled from the government of the city and forced to retire to Sind, the English favoured Mia Achan, the successful competitor, and the Dutch supported Safdar Khan and his son Wakhar Khan. In 1751 Wakhar Khan returned to Surat and by promising to grant him half of the city revenues won over Damaji Gaekwad to his side. Mia Achan, unable to resist this increased force, was driven from the government of the city and had to take refuge in the castle. This command, too, he soon lost. For in the same year (1751) the Siddi sent some cruisers to the Tapi to recover the fleet subsidy which the Surat government had failed to pay him. These ships reaching Surat just before the bursts of the rainy season, under the plea of stress of weather, remained in the Tapi until their leader Siddi Masud found an opportunity of seizing the castle.[2] The Siddi and the Dutch now united in recalling Safdar Khan from Sind. On again resuming charge of the city in 1751, Safdar Khan was able to induce Damaji Gaekwad to accept one-third share in

1. Carsten Nieburhr's Travels (1764), in Pinkerton's Voyages, X., 214-216.

2. Grant Duff, II., 50 and 60.

the revenue of the city instead of one-half which Wakhar Khan had agreed to give him.[1] Mia Achan, ousted from both his commands, was forced to leave Surat and seek refuge with his allies, the English in Bombay.[2]

English and Marathas, 1751.

On learning of the defeat of their faction at Surat. the English invited the Peshwa to join in a scheme for ousting the Sidhi and Safdar Khan from Surat and for dividing between themselves the command of the city. The English engaged equip a fleet and attack Surat from the river, while the Peshwa to sent an army under Raghunathrav to act on the land side. These preparations came to nothing. The Mahratta army, urgently required in the Deccan, was recalled and the English failing in an attempt to induce Nak A'lam Khan, the ruler of Broach, to join with them in their designs on Surat, were forced to retire to Bombay.[3] About the same time the Peshwa obtained from the Gaekwad one-half share of his interest in the revenues of Surat, and so was less disposed to join with the English in any attempt on the city. In consequence of this English interests suffered severely at Surat. Their gardens and cattle were taken from them and the factors placed in confinement. So entirely, did Mr. Lambe, the head of the English factory, admit his defeat that in November 1751 he, under the influence of the Dutch, signed a treaty with Safdar Khan and Siddi Masud, under the terms of which he agreed to send from Surat all the soldiers in the Company's service, Europeans as well as Indians.[4] This treaty was, however, repudiated by the Bombay Government and in its place, in 1752, a fresh set of articles was drawn up under which their property was to be restored and the English were to be paid a sum of Rs. 2,00,000 for the expense they had incurred in the struggles and the loss sustained at their custom-house.[5] To pay this English indemnity, a special one per cent, or *ekotra*, cess was levied on all Hindu and on almost all Musalman traders. Armenians, Jews, and all Europeans trading under charter privileges would seem to have been exempted. The levy of the special cess was continued till 1758, when the payment of the English indemnity was completed and the charge abolished.[6]

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1. Damaji consented to this reduction because he was preoccupied on Satara side. He was defeated by the Peshwa in May 1751 and kept in confinement upto 30th March 1752 when he was released on condition that he ceded half the share of his Gujarat conquests to the Peshwa. G. S. Sardesai : New History of the Marathas, Vol. II, pp.309-10-11.

2. Stavorinus, III, 52.

3. Aitchison, VI., 215.

4. Aitchison, VI., 215. So keenly did Mr. Lambe feel the failure of his plans and the censure of the Bombay Government that he committed suicide.

5. At this time the rates paid by Hindu merchants amounted to seven per cent ; by Musalmans, except some favoured individuals, to 4½ per cent ; by Armenians to 3½ : and by chartered Europeans to 2½ per cent.—Surat Papers, 267-268.

6. Aitchison, VI., 215.

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Siddi Masud, 1752-1756.

At Surat during the next four years Siddi Masud, a man of great ability, while continuing on friendly terms with Safdar Khan and the Dutch, is said to have drawn into his own hands the entire management of the city. He died in 1756, leaving a young son, Ahmad Khan by name. Disputes soon arose, and before the end of 1757 Surat was again disturbed by hostile factions, the Siddi and the Dutch struggling for power with the English and Safdar Khan. At this time, hoping to secure for himself the government of the city, a certain Ali Nawas Khan, who had hitherto sided with the ruling nawab Safdar Khan, now went over to the Siddi and Dutch faction. Upon this Safdar Khan, who had no direct heir, transferred his favour from Ali Nawaz Khan to one Faris Khan, who had gained the support both of the Mahrattas and of the English. At the same time (1757) the nawab, on the condition that they should expel the Siddi from the castle, offered to make over to the English the command of the fleet. But this offer was not accepted.

Nawaz Khan, 1758

In January 1758, Safdar Khan died,[1] and was succeeded in his government of Surat by Ali Nawaz Khan, Ahmad Khan the Siddi continuing commander of the castle. On the accession of Ali Nawaz Khan, the party in Surat who supported his rival Faris Khan proposed to Mr. Ellis, the chief of the English factory, that Faris Khan should be appointed governor of the city and that the English company should undertake the command of the castle and the management of the fleet. If the English undertook the management of the fleet, the supporters of Faris Khan guaranteed for a term of five years an annual payment of Rs. 2,00,000. In consequence of these proposals a treaty was, in March 1758, arranged between the English company and Faris Khan, under the terms of which it was agreed : (i) that the English should establish Faris Khan in the postion of governor of Surat ; (ii) that the English should obtain command of the castle and should hold three of the city gates ; (iii) that Faris Khan should bear the expenses of the war and besides pay a sum of Rs. 2,00,000 as a donation to the European troops. No action was, however, taken on this treaty in consequence, it would seem, of an anxiety on the part of the Bombay Government not to offend the Mahrattas.[2] Meanwhile, before the end of 1758, Mia Achan who had since his expulsion from the command of the castle by the Siddi Masud in 1751 been living in Bombay returned to Surat and with the support of Siddi Ahmad Khan and his own influence with certain members of the family of the late Teg-bakht Khan, in December 1758 expelled Ali Nawaz Khan from the government of the city and established himself in his place. Soon after this occurred (January, 1759), the

Mia Achan, 1758.

1. Said to have been poisoned by Ali Nawaz Khan : Gaikwads of Baroda Volume I page 122.

2. The object of this treaty was frustrated by the Mahrattas sending their agent to the Bombay Government to hint that they meant to attack Bassein, and probably Bombay. Grant Duff II 115 Backwad's of Baroda Vol. I p. 131.

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Government of Bombay were strengthened by the presence of a squadron of men-of-war under Admiral Pocock who offered, in the event of any active measures being undertaken, to reinforce the company's armament with two ships. Mr. Spencer, who had meanwhile on the death of Mr. Ellis (1758) succeeded to the chiefship in Surat, forwarded to Bombay a detailed account of the state of affairs in that city. From Mr. Spencer's account it appeared that Siddi Ahmad Khan was all powerful in Surat, leaving to Mia Achan not so much as the nomination of the officers properly belonging to him. That, moreover, the two rulers distrusted each other, as the Siddi suspected Mia Achan of corresponding with the Mahrattas. At the same time the government of the city was bad and the traders, fearing above all things that the Mahrattas might step in petitioned the English chief to take command of the castle and fleet. The English could now very confidently accept this undertaking as they wanted 'to re-establish the Honourable Company's affairs on a lasting footing here,'[1] and once for all to put an end to the occasional hardships and humiliations to which the English factors were constantly put at the hands of the Nawab. They had already assumed a political role and gained a firm footing in Bengal by their victory in the battle of Plassey. Earlier they had defeated the naval power of the Mahrattas under Tulaji Angre leaving only the Siddis as the major hurdle to be overcome in their race for supremacy on the Western Coast. With the Peshwas they had friendly relations and although Damaji was anxious to prevent the English from becoming too powerful, he could be thwarted in his efforts by pointing out that he would thereby incur the displeasure of his master, Nana.[2] Taking these factors into consideration and strengthened by the presence of the squadron of men-of-war, the Government of Bombay determined to make an attempt to oust the Siddi from Surat and gain his place as commanders of the castle.[3] With the object of preventing the Mahrattas from taking part in the struggle, the Bombay Government took the precaution of drawing up certain articles, under which the Mahrattas ageed : (i) that on account of the ruin to trade caused by the command of the castle, the Siddi should be turned out of Surat ; (ii) that the English should take possession and have the sole command of the Surat castle ; (iii) that the English should have the sole power of appointing the governor of Surat city ; (iv) that the subsidy for the fleet (*tankha*) should be divided into three shares, one for the English, one for the Peshwa, and one for the nawab of Surat ; (v) that the Mahrattas should not take part in any quarrels or disputes that might arise in Surat. On hearing of the determination of Bombay Govern-

State of Affairs, 1759.

1. Gaekwads of Baroda Volume I p. 131.

2. Gaekwads of Baroda, Volume I, page 136.

3. The immediate grounds for the English expedition against Surat were : (i) that the Siddi's people had (1758) insulted some Englishmen and refused redress ; (ii) that the Siddi had proved himself unfit for his post as admiral, being unable to hold his own against the Maratha fleet.—Select Committee. Nawab of Surat's Treaty Bill, 10-11.

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The English, 1759

ment, the chief member for whose safety the English had a hostage in the person of Mia Achan's son, left Surat and went to the bar of the Tapi. Some delay took place in despatching troops from Bombay and it was not till the 15th February (1759), that the body of land forces, consisting of eight hundred European, one thousand five hundred Indian infantry, and a detachment of royal artillery arrived off the mouth of the Tapi. Captain Maitland of the royal artillery was in charge of the land forces and Captain Watson of the Company's marine incommand of the armed vessels. The strength of the defenders was estimated at about two thousand Musalmans, Hindus, Arabs, Pathans and others in the service of the Siddi, and the nawab's corps 4,000 strong. There was always, however, the further risk that the nawab or the Siddi mistrusting their own strength, might fly to the desperate resource of calling in the Mahrattas.

The troops were landed at Dentilauri,[1] about nine miles from Surat, and remained there for a few days for refreshment. While these movements were going on, news came on the 20th that the Mahratta troops under Yeshwantrao Pawar had come upto Gandevi at the desire–so did the Mahratta agent put it–of the President at Bombay to help the English in their movements at Surat.[2] Yeshwantrao wanted to know where his troops should join them. The English, while promising to respect the rights of the Peshwas in the revenue of Surat, would have no partner in the military affair. They therefore avoided a direct answer to his question. Yeshwantrao however continued to move on. He reached Navsari on the 22nd, moved to Palasana on the 27th, to Kumbharia on the 28th and finally encamped on the Tapi at Varachha, three miles to the north-east of Surat on the 1st of March. Mia Achan, the governor of the town, sent a messenger to Pawar, proposing that the Mahrattas should help him in holding the town against the English : but Pawar was under strict instructions from the Peshwa not to break with the English and hence could not consider the proposal. The Mahrata army had to wait without any work during these critical days. The English in the meanwhile had already started their march against Surat from the south-west. On approaching the town, captain Maitland found that some of the Siddi's people had taken post in the French garden on the left bank of the Tapi, about a quarter of a mile to the west of the outer wall, and from this they were dislodged only after a hot dispute of four hours in which twenty men were lost on the side of the English. Captain Maitland then directed the engineer to look out for a proper place for a battery, which was erected during the night, and for four days a brisk fire was kept up from two twenty-four pounders and one thirteen inch mortar. The Siddi's forces,

1. It seems to be the present Danti hamlet to the east of the Bar, and not Dumas town higher up the river, for Dumas is separately mentioned in the records : *vide* 'Surat' Episode of 1759' page 20 by Prof. T. S. Shejwalkar, in the Deccan College Bulletin, December, 1947.

2 Gaikwads of Baroda, Volume I, page 144.

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English attacks Surat, 1759.

driven within the outer wall, had taken possession of the Siddi garden and the English and Dutch wharfs immediately above, securing them with works and strong palisades. After this continued firing without any apparent effect, Captain Maitland called a council of war, composed of military and marine officers, when they concerted a plan for a general attack and resolved to execute it next morning. Owing to the delay in their arrival from Bombay, the spring-tides had been lost, and the large ships were therefore of no use. The company's grab of twenty guns and four bomb-ketches were warped up the river during the night and in the morning anchored opposite the Dutch wharf. Then a general attack began from the vessels and a battery under cover of which about eight o'clock the boats put off and landed the troops near the English garden. After a slight resistance the Siddi's forces took to flight, leaving the English troops in possession of the outer town.

The city is taken.

The inner town and the castle had still to be taken. In order to attack them both at once, three mortars were planted at the distance of about seven hundred yards from the castle and five hundred yards from the wall of the inner town. About six in the morning the mortars began to play very briskey and continued firing till two the next morning. The cannonade and bombardment put the besieged into such a consternation that they never returned one gun. During the attack several messages passed between the principal persons in the town and Mr. Spencer, the chief of the English company. Every effort was made to induce the friends of Faris Khan to place him in charge of the city. But after two days the wish of the people seemed to be that Mia Achan should continue Governor of the city and Faris khan be appointed his deputy. It was, therefore, proposed to Mia Achan and his party that on condition that Faris Khan was made deputy governor and the English established in the possession of the castle and the fleet subsidy, Mia Achan should be continued as governor of the city. Mia Achan accepted these terms and on the 4th March 1759 the agreement was concluded. Upon this Mia Achan opened the Mecca gate in the inner wall, and the Siddi, judging that further resistance was useless, agreed to give up the castle. His people were allowed to march out with their arms and accountrements, and also to take away their valuable effects, including even the common furniture of thei houses. These changes were effected with the greatest regularity and the English were peaceably put in possession of the castle and subsidy. The killed and wounded on the side of the English did not amount to more than one hundred Europeans.

1. This account of the capture of Surat is taken from the Surat Papers, 56-59, and from Stavorinus, III., 33-59. Stavorinus, 57, states that one of the Siddi officers was paid by the English to arrange that no resistance should be made to the English on their attack on the castle. He hints also that the same means were used to prevent Mr. Taillefort, the director of the Dutch company, from joining in the struggle, (For a more detailed account of Dutch plan see p. 165).

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Marathas by-passed.

On the morning of the 5th the British flag was hoisted on all vessels in the river and Spencer made his state entry into the town. As soon as the occupation of Surat was complete, the English came out with their policy towards the Mahrattas. Krishnaji Anant writes from Surat on 6th March 1759 to his master the Peshwa at Poona ; "We have maintained friendly relations with the English, but they are arrogant. It is now two days that the town is captured by them ; but they would not hold even a courtesy talk with us."[1] Ultimately weary of waiting without any profit near Surat, Yeshwantrao and his followers prepared to move away from the scene and march inland on 27th March. In sheer desperation Yeshwantrao wrote to his master on 11th March 1758 "if it was the aim, never to break with the English there was no point in sending us to Surat. We would have been masters of Surat if only we would have been allowed to fight the English."[2]

Imperial Sanad obtained from Delhi.

The English now lost no time in sending petition to the Delhi Emperor Alamgir II requesting him to bestow on them, the commandantship of the Surat castle together with the admiralship of the Moghul fleet stationed there. after receiving a customary Nazrana from them. Simultaneously the English sent "an application of all the citizens of Surat, including rich merchants and Moghul officials beseeching the Emperor to bestow the offices connected with Surat on the valiant and just officers of the Company."[3] Accordingly Sanads were despatched from Delhi in the name of the emperor by the Vazir-Ghazi-uddin. peshwas' consul at Delhi no doubt argued that the authority of bestowing sanads should rest with the Pant Pradhan (Peshwa) who will as an agent of the Emperor bestow the offices on whom he likes.[4] But this was all too late ; for the sanads had already been issued. Later when the Peshwa in the course of his talk with the English ambassador Mr. Price at Poona commented upon the conduct of the English in surreptiously securing the Moghul sanads from the puppet Emperor and the Vazir who lived under the protection of the Mahratta arms, the English blunty replied that the Sanads by which they had been appointed Commandant of the Surat fort and admiral of the Moghul fleet were as valid and as legal, as the sanads by which the Peshwa presumed to interfere in the Surat affair.[5] The Peshwa was thus practially ousted from Surat affairs with a complete diplomatic defeat. The English received the Moghul farmans bestowing Surat on them with great ceremony, punctiliously observing the formalities then followed in India on the occasion of receiving the Imperial grants. They invited the other European merchants to

1. Selections from Peshwa Daftar Volume 24 letter no. 233
2. *Ibid*, 24, 234
3. T. S. Shejwalkar : Surat Episode of 1759, page 29.
4. Selections from Peshwa Daftar, Volume 24, 260.
5. Forrest : Maratha series, Volume I, page 126.

the ceremony, who refused on the first occasion but accepted the invitation on the next. In Bombay the ceremony was repeated, when the President received confirmatory letters from Delhi. The yearly payment of two lacs of rupees that had been made to the Siddi on account of the command of the fleet at Surat, was now transferred to the Company in accordance with the Imperial farman dated 4th September, 1759.[1]

Subsequent relations with the Marathas.

Orders having thus been received from Delhi it was necessary to settle about the details, through negotiations with the local powers. For this purpose Mr. Price, the English ambassador to Poona, waited upon Damaji Gaekwad, then in Poona, in October 1759. In the course of their conversation, Mr. Price pointed out that, as the Honourable Company had taken possession of Surat castle 'there were some revenues annexed to it and for maintaining the fleet, which lay in the country under Damaji's command' concerning which he would issue orders to enable the officers of the Honourable Company collecting them as before without obstruction. Thereupon, Damaji sent the necessary orders to the Paraganas under his command for paying the usual revenue to Surat castle as well as for supporting the fleet. He also sent an order to the commanding officer of his own fleet not to molest any vessels trading under the Honourable Company's protection.[2] In spite of this settlement there were frequent occasions of friction as regards the transit of goods from the port to the up-country region which belonged to the Mahrattas. They had to be somehow resolved in a practical manner sometimes through the interventon of the Nawab. As the Mahrattas were rulers of the region, it was a piece of practical wisdom to show respect to their chief, and even to send him a present as was undoubtedly done by the Company's officers in 1762 when they decided to offer a present of Rs. 2,500 to Damaji who was then on his way to Poona.[3]

British Period, After 1759

1759-1800.

The period subsequent to the capture of Surat by the English in 1759 can be divided into two parts—the first, lasting from 1759 to the close of the eighteenth century when the governors of Surat, though appointed by the English, still to some extent held a position of nominal independence ; the second, after 1800 when the whole administration was taken over by the English.

The forty years of divided rule at Surat with the English in command of the castle and a nominally independent governor in charge of the city, comprise two periods of nearly equal length. The first, from 1760 to 1780, a time of active trade, when the

1. Edalji Dosabhai : History of Gujarat, page 196.

2. Gaekwads of Baroda, Volume I, page 154.

3. Gaekwads of Baroda, Volume, I, page 163.

city increasing in size is spoken of (1772) as one of the greatest emporiums of trade in India.[1] The remaining twenty years, a time of decline in the fortunes of the city, ending in the transfer of the greater part of its foreign trade to Bombay.[2] The chief causes of the prosperity of Surat during the first of these periods would seem to have been its superior order and security, as compared with the state of the districts of northern Gujarat and the sudden development of a great export trade in raw cotton to China.[3] Towards the close of the century, besides the general disorder over almost the whole of India, the anarchy in Persia[4] and Arabia, and the repeated wars in Europe, two local events, the storm of 1782 and the famine of 1790, combined to hasten the decline of Surat's prosperity.

During this term of forty years (1759-1800) there were altogether four city governors or nawabs in Surat. Of these, the first was Mia Achan who being governor when the English obtained the command of the castle,[5] was continued by them in charge of the city till his death in 1763 (February 27th). The next governor was Kutb-ud-din the son of Mia Achan who, on his appointment by the Bombay Government, without waiting for the patent of the court of Delhi, assumed office with the title of Mir Hafiz-ud-din Ahmad Khan Bahadur. On this occasion (1764) the agent of the governor of Surat was recalled from Delhi and all connection with the court of the great Moghul ceased.[6] Hafiz-ud-din continued in office for twenty-seven years,

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1. Forbes' Or. Mem., I., 145.

2. Surat Papers, 278.

3. The export of raw cotton to China dates from about the year 1770, when, in consequence of a scarcity of grain, the Chinese government issued a decree forbidding the cultivation of cotton. In 1777, so important was this trade that on an average thirty ships a year, of from 500 to 1.000 tons each, sailed from Surat and Bombay to China. (Parsons, 261). Towards the close of the century this trade fell off. The Surat cotton was (1787) so greatly adulterated that much of it sent by the company to China remained unsold (*Hove's Tours : Bom Govt. Sel.* No. XVI, New Series, 132). The Chinese again began to grow their own cotton and at the same time Bengal had become a formidable rival to Bombay.

—Miburn's Or Com., I., 218.

4. One of the greatest blow to Surat trade was the capture of Bussorah by the Persians (April, 1776). "The trade from Surat to that port has ceased," wrote Parsons in 1777, "nor" he adds, "will it be renewed until, by some revolution in Persia, the Turks become masters of it again."—Parsons, 262

5. The position of the English as commandars of Surat castle was confirmed by the following orders from the court of Delhi : (i) an order, or *hushul hukam*, under the great seal of the nawab vizir of the court of Delhi, directing Mr. Spencer to take care of the Surat castle, and of the preservation of trade in Surat seas: (ii) 1759, August, 25th, an order from the high steward, or *khansaman*, committing the charge of the king's fleet to the company, (iii) 1759, Setember, 4th, an imperial patent or *farman*, investing the company with the command of the castle ; (iv) 1759, September 18th, an order for the regular payment of a yearly subsidy of Rs. 2,00,000 towards the maintenance of the fleet.

6. Surat Papers, 75. There were three other candidates for the office of governor : (1) Faris Khan, the deputy governor ; (2) Ali Nawaz Khan, a former governor who, in 1758, was ousted by Mia Achan ; (3) a certain Nur-ud-din Ali Khan.

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Governors of Surat, 1759-1800.
I. Mia Achan, 1759-1763.
II. Hafiz-ud-din 1763-1790.
III. Nizam-ud-din 1790-1799.
IV. Nasir-ud-din, 1799.

and died in 1790. On the death of Hafiz-ud-din, the governor-general of the English company, deciding that he had a claim on the ground of inheritance, chose Nizam-ud-din, the eldest son of Hafiz-un-din, as the next governor. Contrary to the practice on a former occasion, application was made to the court of Delhi for a patent in favour of Nizam-ud-din. But no patent was granted and after waiting for two years Nizam-ud-din was installed governor by order of the English. Nizam-ud-din remained in office for nine years, dying in 1799 (January 8th). Nizam-ud-din left an infant son, but the child survived his father only by about a month. It was then arranged with Nasir-ud-din, the brother of the late nawab, that he should receive from the British the title of nawab, and with it a yearly revenue of £10,000 and one-fifth more of the surplus net revenue of the city. At the same time all the powers of the governor of the city were to vest in the English.

During the whole of this period, though the management of Surat was nominally in the hands of the city governor, so entirely did all power centre in the English that, in 1774. a Dutch traveller wrote : "The English give laws to all, neither Europeans nor Indians can do anything without their special approbation. The governor of the city does not in this respect differ from the lowest inhabitant. He must obey their commands, although they show him externally some honour, and will not in public allow that he is subservient to them."[1]

It was by their favour that, in 1759, Mia Achan was continued in his office as governor. Mia Achan's successor, Mir Hafiz-ud-din, owed his appointment (1764) entirely to the English. two years later the English chief,[2] Mr. Hodges dissatisfied with the state of the city, was able' in a manner to compel the nawab' 'to unite with himself in the administration of the city two nominies of the English chief. Again, in 1767 (April 4th), the Bombay Government received instructions from the court of directors to keep the power of the governor of Surat city within as narrow bounds as possible without offending him,'[3] and in the next year (1768, March 25th) were reminded that 'in great measure the sole management. or at least. the superintendency of the city belonged to the English.'[4]

1. Stavorinus, III., 59. Parsons (1777) says, "the government of Surat is, with reason, called double. For instance, should be French, Portuguese, or Dutch ask for alteration of duties or increase of privileges, if the English chief is disinclined to grant their request he tells them to ask the nawab, at the same time communicating to the nawab what answer he is to give." "They all," he adds, "understand the farce." (Parsons, 250). So also Niebuhr (1763) "the English are the actual sovereigns of Surat. They keep the nawab of the city in a state of absolute dependence." (Pinkerton's Voyages, X., 215). Two incidents show how entirely, in 1777, the English chief controlled the actions of the nawab. In February 1777 the nawab informed the English chief that he intended to receive a visit from the Dutch director, Mr. Van-de-Graaf. But on the ground that there was no precedent for such a meeting, his request was refused. About the same time certain French ordnance and military stores which the nawab had allowed to be landed were, by order of the English chief, reshipped.—Secret Diaries, 1877.

2. Surat Papers, 470. 3. Surat Papers, 73.

4. Surat Papers, 73.

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Chief events, 1759-1800.

During the term of double government (1759-1800) few events of general interest took place at Surat. In 1771 an English expedition was sent from Surat against the city of Broach. But the arrangements were ill-planned, and the attempt failed. In 1775 the English authorities at Surat involved themselves in the internal dissensions of the Mahrattas. Raghoba, uncle of the deceased Peshwa in his desire to strengthen his claim to be the Peshwa as against the infant Sawai Madhavrao growing under the care of the Barbhais (council of elders) came to Gujarat in search of support. He was defeated by Haripant Phadke at Wasad on the banks of the river Mahi and compelled to fly from pillar to post. He reached Surat where he concluded a treaty with the English on 6th March 1775, in which the English promised to support the claims of Raghoba on condition that he ceded important places in Thana and Surat areas and meet the expenses of the war.[1] Accordingly an English force from Bombay arrived under Colonel Keetinge at Surat. He intended to plan an attack on the Mahrattas near Surat and ordered a detachment under Captain Steuart for the purpose. It was joined by 1,000 country troops belonging to the Nawab. At 10 o'clock in the morning on the 11th March, the advance Mahratta patrols were contacted and the march was pursued with vigour. At 3 o'clock when Captain Steuart reached the Mahratta camp, they fell in great confusion as they never expected an attack at that hour and rode off in a great hurry leaving their tents and other equipment.[2] In the meanwhile Col. Keetinge with his main army advanced towards Cambay and formed a junction with Raghoba. It is unnecessary to enter into the details of the military manouvres in that region. Suffice it to say that in 1776 Raghoba again retired to Surat and remained there for a time under English protection. The next attempt of the English (1778) to enforce his claims upon Poona ended in the latter's capitulation at Wadgaon (1779, January) tothe Poona army. The English had thus to part company with Raghoba. In consequence of this disaster Colonel Goddard, summoned to help the Bombay Government, arrived in Surat (1779, February 26th).[3] In May, Raghoba suddenly turned against the officer watching his movements and ran towards Surat. He was welcomed by Goddard, who seemed to have been privy to Raghoba's plan of escape. Goddard won over Fatesing Gaekwad, the ruler of Baroda, and together they started a fresh war in Gujarat with the object of retrieving the disaster of Wadgaon. Sickness prevented Raghoba from being able to bear the strain of military marches ; he therefore remained behind at Surat and his adopted son Amritrao accompanied general Goddard, on his behalf.

1. The text of the treaty contains 16 articles and is given in Gaekwads of Baroda Volume II, pages 249-252.

2. Grant Duff, II., 276.

3. Gaekwads of Baroda, Volume II, page 256.

In the meanwhile, Nana Padhavis was engaged in forming a strong anti-British Confederacy in India, in which the Dutch participated and planned an attack on Surat. The English instantly adopted strong measures to prevent the Dutch from taking any part in the affairs of Surat.[1] About the same time (1780, January) as the commencement of hostilities against the Mahrattas. Mr. Boddam, the English chief, occupied the Peshwa's districts near Surat. And very shortly fterwards (1780, February 15th), on the fall of Ahmedabad, in return for the grant of the Peshwa's territories north of the Mahi, Fatesing Gaekwad ceded to the English his share in the districts south of the Tapi. At Surat the timely arrival from Bombay of a body of European troops freed the city from the alarm to which the rumoured advance of Shinde to seize the person of Raghoba had given rise. South of Surat the country was ravaged by a body of Mahrattas. This force had been stationed in the Konkan, and in the absence of the British troops in northern Gujarat came plundering northwards as far as the city walls. To free the country from these invaders, a detachment under the command of Lieutenant Welsh, an officer of the Bengal cavalry, was sent from Surat. This expedition was most successful. They surprised the Mahratta camp, killed upwards of a hundred of them, mortally wounded their leader Ganeshpant, took his guns, three in number, and carried off the whole of his baggage (1780, March 23rd). "The inhabitants," wrote Mr. Welsh, "seem exceedingly happy and are coming in from all quarters." Welsh, then advancing, southward reduced Parnera, Bagwara, and Indegarh, three forts in the neighbourhood of Daman much desired by the Bombay Government.[3] The districts south of Surat did not long remain in the hands of the British. Under the terms of the treaty of Salbai (1782-1783) all Gujarat territory acquired by the British since 1775 was restored to the Mahrattas.[4] From this time till the close of the eighteenth century the districts originally subordinate to Surat remained, as before, distributed between the Peshwa and the Gaekwad.'[5] There was however constant friction between the Poona Durbar and the Gaekwads on financial and other grounds, and the latter generally followed the policy of remaining friendly with the English and found it on the whole to their advantage.

In 1794 the Poona Durbar attempted to exact from Govindrao Gaekwad the surrender of Gaekwad's share of Surat *Atavisi* and of the *chauth* within the city of Surat, which evidently involved a dangerous addition of the Peshwa's power in the city and the neighbourhood ; the English therefore decided to oppose the deal on the ground that it went against the term of the treaty of

1. Grant Duff, II., 286.
2. Grant Duff, II., 287.
3. Grant Duff, II., 295.
4. Grant Duff, II., 324.
5. Surat Papers, 51 and 168.

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Salbai. Accordingly Malet entered into correspondence with the Poona Durbar, the result of which was that they desisted from the act, to the great relief of Govindrao Gaekwad who felt grateful to the English for their firm policy.[1]

Turning to the general condition of Surat during the period it may be stated that in 1782 Surat was visited by a storm so servere that a number of buildings in the city were destroyed. Though suffering from the decay of the spice trade with Java, and from the loss of its commerce with the Persian Gulf, Surat was to some extent able for a time to recover from this disaster. But a few years later the famine of 1790 still further impoverished the city, and a European war increased the difficulty and dangers of its foreign trade. With the decay of its commerce the revenues of the city declined. The nawab, trusting to the English for protection, reduced the strength of his armed force and of his police and made little attempt to protect the city or maintain order within its walls. So entirely had he lost control of the city, that in 1795, though a fierce religious fight between Hindus and Muhammadans raged for many days, no effort was made to restore order or to punish the offenders. A disturbance of a curious character took place in the city in A.D. 1799. Some four or five hundred Muslim women of the poorer classes went in a body to the residence of the English chief, because they felt that he was responsible for the rise in prices of grain and tobacco, which were really caused by the tax imposed on them by the Nawab. When given to understand that the English chief had nothing to do with the imposition of the tax, they assailed the Nawab's Bakshi (Paymaster) and detained him for some two hours, clamouring for relief. The story is sufficiently indicative of the disaffection widely spread and deeply felt.[2] As the nawab had ceased to do his part in managing the city and as the share of the revenues originally assigned to them was insufficient to meet the charges which the entire protection of the city entailed, the English, in 1800, took advantage of the failure of direct heirs to assume the undivided government of Surat.[3] In the same year Govindrao Gaekwad was induced to part with his share of *chauth* in Surat and recall his *chauthia* from the city. The Gaekwad was not only pleased to make his share as a free gift to the company but offered to put one of his sons in the service of the company with 5,000 horses, and promised that he would himself like to be of help to the company with 20,000 horses and 25,000 foot.[4]

Aspect of the city, 1759-1780.

During the early part of this period (1759-1780) Surat is described as 'gay, prosperous, and one of the principal cities of

1. Gaikwads of Baroda Volume III pages 186-187.
2. History of Gujarat by Dosabhai page 222.
3. Surat Papers, 447.
4. Gaikwads of Baroda Volume III page 234.

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India.'[1] 'At the mouth of the Tapi, the bar was in the fair season (October to May) generally crowded with merchants ships from all the commercial nations of Europe and Asia. At Surat itself the river was thronged by vessels, and its banks were busy with ship-building.[3] Round the city the country was fertile and highly cultivated, and on all sides it was approached 'by avenues planted with shady trees.'[4] From the river the city looked bright and lively. The French lodge and garden, the English and Dutch wharfs, and the venerable castle were gay with many and different coloured flags.[5] Between the double row of the city walls the space, with very few houses, was given up to large dwellings and rich gardens.'[6]

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1. Forbes' Or. Mem., I., 243. Compare Auquetil de Perron, who (1758) calls Surat one of the largest and most populous towns of India.--Kawasji's Translation, II.

2. Forbes' Or. Mem. I., 245.

3. Forbes' Or. Mem., I., 248.

4. Of these, to the west, was the Dumas road passing into the city through the Mecca gate; to the south was the Navsari road entering through the Sara gate; to the north the Katargam and to the north-east the Fulpara roads.But, among Europeans, the favourite resort was through the little gate to the north along the 'green walk,' a narrow and closely shaded lane, reminding Stavorinus (1775) of the 'country roads in his native and pleasant island of Walcheran. 'Voyages II., 461.

5. Stavorinus, III., 162 ; Forbes' Or Mem., I., 245. Out of compilment of the court of Delhi, the English and Moghul flags were both displayed on different towers of the castle and as admirals of the fleet the Moghul's standard was hoisted on the principal armed vessels in the Surat station.

Carsten Niebuhr, 1763 ; Pinkerton, X., 211 Shortly after Niebuhr visited Surat, the town must have increased in size, as Forbes (1772) says "between the outer and inner walls are many streets and houses." (Forbes, Or. Mem., I., 247) ; and Parsons (1777) found the intermediate space between the two walls almost as thickly peopled as the city (251) Of the gardens mentioned in the text, six—three private and three belonging to the nawab—are specially noticed. The private gardens were : one built by Mr. Price , one at Fulpara, belonging to the English broker ; and the Dutch garden, the finest (1763) of the European gardens, rich and charming in aspect. (Neibuhr, in Pinkerton, I., 212). Of the pubiic gardens there were : I. The Mahmudi garden built by Teg-bakht Khan (1733-1746) in Salabatpura. This garden was (1774) surrounded by a high stone wall, about a quarter of an hour to walk round. The enclosure contained many buildings. Of these one was of great dimensions, and the rest were separate quarters for each of the nawab's wives. In this garden were two artificial lakes one 150 feet by 75, the other 60 feet by 12. At one end was a beautiful cascade 20 feet high. On either side of the waterfall fountains played across, forming a watery arch The parts devoted to flowers were, according to season, filled with balsams, poppies, and various flowers of an equal height closely planted, and so disposed as to resemble a rich Turkey carpet. (Forbeds' Or. Mem., I., 252). These pleasure grounds were said to have cost nine lakhs of rupees. (Niebuhr 1763 says £50,000 Pinkerton, X., 212). In 1774 they had already been allowed to fall into disrepair (Stavorinus's Voyages, II., 470). II. The next was the Begam Saheb's garden, built by a sister of the emperor Aurangzeb about the year 1700. It was situated in Begampura, the south-eastern division of the suburbs, near the Navsari gate, and covered about fifteen acres, the whole enclosed by a wall. Between 1774 and 1777 this garden had fallen into deplorable decay. But even at its best it was, in Stavorinus opinion, 'for gallantry nothing like the Dutch garden.' (Stavorinus' Voyages, II., 470 ; III., 177) III. The third garden was laid out by the nawab Hafiz-ud-din in 1775, outside the Katargam gate to the north of the city. The nawab called it Alla bag, or the garden of God. But in laying out the ground many houses were cleared away, and the people, displeased with this exercise of power, nick-named the place *Zulami-bag*, or the garden of oppression, a title it bore for a long time afterwards. In 1775 this garden had a saloon, an aviary, and a parterre of most fragrant flowers (Stavorinus' Voyages, II, 470). All the gardens suffered severely in the storm of 1782. The Mahmudi garden became a wreck, and a wreck it was allowed to remain.

Within the inner walls the markets were filled with costly merchandize, and the crowded streets, with their rich carriages and gay palanquins, were not infrequently enlivened by the pageant of a procession in honour of the nawab or of the English chief.[1]

But, in spite of its wealth and prosperity, Surat 'could not be called an elegant city.'[2] Of its dwellings and shops there were, except in one quarter of the city on the way to the Delhi gate, where there were none but stone buildings, few houses of any external good appearance, and in many places there were only little huts made of bamboo and plastered with mud.[3] Again, the streets, though some of them were broad,[4] were not paved,

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But before the year was over, the European gardens were again recovering their looks and the *Zulami bag* was aleady restored to its former beauty. The grounds were more fertile and beautiful than the generality of the Indian gardens. It was profusely adorned with trees, shrubs, and flowers, not only those indigenous to Hindustan, but with every variety procurable from China, Persia, and Europe. The apple and peach flourished with Chinese roses, and oranges were interspersed with mangoes, plantains, and tamarinds.—Forbes' Or. Mem., III., 408.

1. Of one of these processions, Parsons (1777) has left the following description ; First came buffons, then music, trumpets, hautboys, drums, and kettle-drums, on richly caparisoned camels ; next a company of archers, musketeers a body of cavalry, and many military officers riding stately steeds. Behind the officers, and surrounded by a guard of horse, went five elephants, each of them bearing a most splendid carriage decorated with scarlet cloth, gold lace, and embroidery. The first and second were empty ; in the third was the nawab, and the fourth and fifth were, like the two leaders, only for show. Next came more great officers, among them 'Charles Bouchier, Esq., the present mint master,' each in a palanquin richly inlaid with gold silver, ivory, and tortoise shell, with a guard of eight men, four on either side richly clothed. Then, again, as in front, bodies of archers, musketeers, and horse guards, the whole making a gallant appearance.' (Parsons, 265). Forbes gives a similar account (Forbes' Or. Mem. I. 261). Not many years before (1763) Neibuhr saw one of these processions. But it was on a smaller scale, and the only part of the show that interested him was to see an English merchant in the European dress, attended by a party of British soldiers, and, with the train of an Indian prince, conduct and regulate a religious festival of the Muhammadans. (Pinkerton, X, 213) . Of the grandeur of the English chief, Parsons tells how, on Christmas, the day was ushered in at sun-rising by a discharge of 21 guns from the castle. At nine in the morning the head men of the French, Portuguese, and Dutch factories made their visits of congratulation. After the head men had left came the other members of the English, French, Portuguese, and Dutch factories ; then the principal gentlemen and merchants—Muhammadans, Gentoos and Parsis—paid their respects, each according to custom, receiving areca-nut wrapped up in betel-leaf. The English gentlemen, both civil and military, dined with the chief. A train of artillery was drawn from the castle into the outer court-yard of the chief's house, and after dinner, at proper intervals five salutes of 21 guns each were fired, after five public toasts. At night the chief gave a supper and a ball, attended by all the heads of factories, and many of the gentlemen and ladies of their respective nations as well as all the English.—(Parsons, 259).

2. Neibuhr (1763), in Pinkerton, X, 211. So also Forbes (1774) says : "The public buildings are few and mean. The nawab's palace makes but a shabby appearance. The mosques and minarets are small, without taste or elegance. The Hindu temples are not more conspicuous, and the resting places much out of repair."—Forbes' Or., Mem., I., 249.

3. Stavorinus (1775), II., 463.

4. There is the same difference of opinion about the streets at this time as there was a hundred years before. Parsons (1777) calls them broad (253) ; Neibuhr (1763) spacious (Pinkerton, X, 211) ; Forbes (1774) (Or. Mem. I., 146) narrow ; and Hove (1788) very narriow and foul. A few may have been broad, but most of them must have been narrow ; the dirty lanes of which Stavorinus complained, and which Auquetil de Perron found (1760, June 20th) knee deep in several places, and so dark that he was on the point of losing his way and being nearly drowned. —Kawasji's Translation, 34.

and so became 'quagmires in the wet season, and in the dry were 'dusty beyond endurance.'[3] The state of the lanes and alleys was worse. Here the people threw every kind of filth, so that a man had to take great care where he walked.[4]

In 1783, six years after Parsons described the city, a great change had passed over Surat. The splendour of the nawab's court, and the magnificence of other leading Muhammadan families, was no more. Neither Hindu nor Muhammadan pageantry now enlivened the streets. The effects of the war that so long had raged in Europe and India were most sensibly felt in Surat. Her dockyards, store-houses, and bazars were silent and forsaken. The usual calamities of war were heightened by the dreadful storm of 1782. Its ravages at Surat were tremendous. The towering mansions of the Moghuls, the slighter Hindu houses, and the mud-built cottages of the lower classes, alike gave way and buried many of their inhabitants in their ruins. The whole city was a scene of desolation.[5] A few years later (1788, September), Surat would seem to have recovered from this disaster, and its trade revived.[6] But before the end of the century its condition again declined. The famine of 1790 pressed sorely upon it, and the religious riot of 1795 would seem to have been both sufficiently fierce and long enough continued to cause serious injury. Trade, too, was deserting the city, and in the decline of his revenues the nawab was allowing great part of the city walls to tumble into pieces and moulder away.[7]

Population, 1759-1800.

About the beginning of this period, after the final capture of Ahmedabad by the Marathas (1757), Surat gained an important increase in her population. Many of the weavers of brocade and other rich stuffs, the embroiderers, jewellers, painters and inlayers of ivory, ebony, and sandal-wood, meeting with no encouragement from the Maratha government, emigrated from Ahmedabad to Surat.[8] Later on, in spite of the decline of its trade, people were said (1797) to be still daily resorting to Surat from Cambay, Ahmedabad, and even from Poona.[9] In 1763 the Europeans estimated the population of the city at a million

1. Parsons (1777), 253.
2. Neibuhr (1763), in Pinkerton, X, 211.
3. Stavorinus, II., 464.
4. Parsons, 253.
5. Forbes' Or. Mem., III., 405.
6. Hove's Tours ; Bom. Govt. Sel. XVI, New Series, 176-177. With regard to the state of the rural parts of the district at this time, the land to the north of the Tapti is said to have been well inhabited and cultivated everywhere with *bajri*, *juwar* and a little rice. (Hove, 25). South of the Tapti, near Surat the soil was naturally so rich that without manure the same plantations, could be cultivated yearly (Hov, 26). But further south, near Gandevi, there was little culture, the greatest part of the district, as far as the eye could reach, being one field of high pasturage. (Hove, 94).
7. Surat Papers, 168.
8. Forbes' Or. Mem., I. 146.
9. Surat Papers, 91.

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of souls. But, according to Neibuhr, this calculations exceeded the actual strength, probably by about two-thirds.[1] In 1774 Stavorinus mentions 5,00,000 as being not an entirely improbable estimate of the Surat population ;[2] Persons (1777) had never seen so populous a city as Surat. There were probably not fewer than from 4,00,000 to 5,00,000 souls. Of these, about three-fourth were Hindus. For the rest, besides the handful of Europeans, there were Muhammadans and Parsis, some Jew and Armenian families, and a great concourse of commercial Persians and Arabians, who came yearly on trading voyages from the Persian Gulf or the Red Sea.[3] In 1788 (September) Hove says that, besides Gentoos of different kinds the town was full in every quarter with a great number of Moghuls, Arabs, Parsis, Jews, Armenians, and Portuguese. In 1797 the population was estimated at 8,00,000 souls.[5] At that time many of the lower classes would seem to have sunk into a miserable condition. Licensed liquior-sellers had a large body of the people in their power and taking the law into their own hands, without any reference to the regular courts of justice, made use of torture to force their debtors to pay them what they owed. Again, there were gaming-houses, 'scenes of daily quarrels and places of refuge for a set of knaves and thieves, who could in no other way shelter themselves even from the Surat police.'[6]

Surat revenues, 1759-1876.

The revenues of Surat during this period were derived from three chief sources,—land, customs, and town dues. Of the greater part of the land revenue that was shared between the Peshwa and the Gaekwad, no details are available. But the yearly receipts derived from the remaining sources, the nawab's share of the land revenue, the land and sea customs, and the town dues, would seem during the latter part of the eighteenth century, to have declined from Rs. 10,38,740 to Rs. 8,35,730.[7]

1. Pinkerton, X, 212, and 214. At this time, besides Hindus and Muhammadans, Neibuhr mentions Parsis in great numbers, 'skilful merchants, industrious artizans, and good servants. 'He also found numerous Indian Catholics, and a few Armenians, Georgians, and Jews.

2. Stavorinus, II, 479.

3. Parsons, 260.

4. Hovels Tours, 176.

5. Surat Papers, 91.

6. Surat Papers, 89.

7. The following statements shows the main heads of the revenue during the years 1759 and 1800 :—

Comparative Statement of Surat Revenue (exclusive of the Maratha share of the land revenue)

Head of Account	1759			1800*			Remarks
	Rs.	£	S	Rs.	£	S	
Nawab's share of land revenue	2,36,000	23,600	0	2,10,628	21,062	16	These figures are from Surat Pape 296 and 276.
Town dues ...	4,26,235	42,623	10	3,30,043	33,004	6	The town dues are for 1778. The English share of customs is an average. Surat Papers 34 and 61.
Customs—							
Nawab's ...	2,56,505	25,650	10	1,65,686	16,568	12	
English ...	1,20,000	12,000	0	1,29,373	12,937	6	
Total ...	10,38,740	103,874	0	8,35,730	83,573	0	

Nawab's share

During this period this portion of the revenues of Surat was shared by three claimants, the nawab, the Mahrattas, and the English. As far as details are available, the nawab's share would seem to have fallen from Rs. 6,70,130 in 1759 to Rs. 4,22,860 in 1800 ; the Maharatta share from Rs. 1,27,500 to about Rs. 90,000 ; and the English share from Rs. 2,84,110 to Rs. 2,47,610[1]. The following are the chief items that went to make up the total claims of the different sharers: I. The nawab ; as collector of the greater part of the revenues drawn from the trade of the city, the nawab assigned certain sums to the Maharattas and to the English. In 1759 his gross receipts are returned as follows :—

(1) Share of district land revenue granted to him by the Marathas (1733-1746) Rs. 2,36,000[*]

(2) Town dues Rs. 4,26,230.[2]

(3) Customs Rs. 2,56,500[3] ; Total Rs. 9,18,730.

From this total amount two sums--one of Rs. 60,000[4] to the Maharattas, and the other of Rs. 1,64,100[5] to the English—had to be taken, leaving a balance to the nawab of Rs. 6,94,620. In 1798, after deducting the corresponding shares due to the Maharattas and to the English, the nawab's total receipts are returned at Rs. 6,51,550. To this, land revenue contributed Rs. 2,50,500 ; town dues, Rs. 3,04,850 ; and customs and miscellaneous items, Rs. 96,200.[6] This total was, however, subject to several reductions ; and in 1800, on taking over the management of the nawab's revenues, the English found that the net receipts were not more than Rs. 3,74,000.[7]

Maratha share

In 1759 the Mahratta share[8] of the city revenue amounted to Rs. 1,27,500, to which one-third share of customs contributed Rs. 85,500, and the share in the town dues Rs. 42,000.[9] About the year 1786 the Maharattas seem to have insisted on an increase in their share of the town dues, recovering under this head a total amount of Rs. 54,300.[10] On the other hand, their share of the customs and other branches of revenue had meanwhile fallen to

1. Surat Papers, 270.
* Surat Papers, 359.
2. Surat Papers, 34 and 61. These are 1778 figures.
3. Surat Papers, 61.
4. Surat Papers, 21.
5. Surat Papers, 151.
6. Surat Papers, 163.
7. Surat Papers, 183.
8. The Maratha share dates from the contested succession in Surat (1748-1751) In 1751 the Gaekwad was compelled to divide his receipts with the Peshwa.
9. The one-third part of the town dues was, during the reign of Teg-bakht Khan (1733-1746) commuted for a yearly payment of £4,200.—Surat Papers, 358.
10. Surat Papers, 359, 361.

Rs. 24,900, so that their total receipts amounted only to Rs.79,200.[1] Subsequently some additions would seem to have been made to the Mahratta share, as at the close of the century, their total claim amounted to Rs. 88,880, of which Rs. 59,070 were derived from town dues, and the rest were customs and miscellneous revenue.[2]

English share.

In addition to the revenue of from Rs. 1,08,000 to Rs. 1,30,000 which under the provisions of their charter of 1716 they drew from their special custom-house,[3] the English, in 1759, on gaining command of the castle of Surat and receiving the charge of the emperor's fleet, obtained a revenue of Rs. 1,64,110[4]. This assignment was, however, insufficient to meet the expenses connected with the castle garrison and the charge of the fleet, which during the first five years of their command (1759-1764) ranged from Rs. 2,15,000 to Rs. 2,45,000. In the decline of revenue towards the close of the century, the English castle and fleet assignments fell from Rs. 1,64,110 to Rs. 1,08,000.[5] The cost of the maintenance of the castle and fleet remained undiminished ; and in 1796, it was calculated that during the preceding thirty-seven years the English had, in the discharge of the duties of their office, spent a sum of Rs. 69,98,250, in excess of the subsidies received.[6] About this time (1795), with the object of lessening the burdens on Surat trade and by changes in their commercial arrangements, the English incurred a fresh yearly deficit of Rs. 1,60,000.[7] So great was the balance against the English that, in spite of the changes introduced (1800) in the management of Surat by which the English were calculated to have gained an additional yearly revenue of Rs. 1,41,410, the expense of the management of Surat still exceeded the receipt by a sum of Rs. 1,36,340 ; the expenses amounting to a total sum of Rs. 9,45,690 and the income to Rs. 8,09,350.

Revenue details.

Of the three chief heads of revenue, (i) land revenue ;[8]

1. Surat Papers, 361.

2. Surat Papers, 427.

3. Details of the receipts from the English custom-house will be found below under the head of Customs.

4. Surat Papers, 27.

5. This sum was composed of two items ; 1. An assignment of Rs. 43,960 to meet their expenses as commanders of the castle. 2. A subsidy of Rs. 1,20,140 as admirals of the fleet. (Surat Papers, 151). The actual receipts for 1760-1761 were somewhat different ; Fleet subsidy Rs. 1,06,660 ; castle revenue, Rs. 42,840 ; total Rs. 1,49 500).—Surat Papers, 26.

6. Surat Papers, 26. This falling off was partly in the castle receipts which, during the five years ending with 1795, averaged Rs. 35,000, as compared with Rs. 43,000, the amount received in 1760, and partly in the fleet subsidy, which had suffered a corresponding fall from Rs. 1,06,660 in 1760 to an average of about Rs. 73,000 during the five years ending with 1795.—Surat Papers, 82.

7. Surat Papers, 10. The changes that caused this fresh deficit were : (i) reduction of custom dues from 5½ to 2½ per cent. (ii) doing away with the profits of shipping and (iii) the appointment of an additional establishment under the name of the commercial board.

8. Land revenue refers only to the nawab's share. No details of the land revenue collected by the Maraths are available.

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Land revenue.

(ii) town dues and (iii) customs the following details are available :—

• In addition to the sum of Rs. 2,36,000 made over to him by the Mahrattas about the year 1735, the nawab in 1785 obtained through English influence an assignment on the revenues of the Olpad sub-division, estimated at a yearly sum of Rs. 40,000.[1] On the other hand, the general decay of the district was such that in 1797 the nawab's territorial revenue was estimated at a sum of not more than Rs. 1,72,500. In 1800, when the British took over the management of the nawab's affairs, they found the gross land revenue to be Rs. 2,10,630 and the net revenue Rs. 1,24,630. In the Peshwa's districts, except in the sub-divisions of Wasravi and Olpad where the nawab's officer collected his master's share, the whole of the land revenue was in the first instance realized by the Peshwa's agent or *pandit*, and the nawab's assignment handed over to his representative or *amildar*. In the Gaekwad's villages the assignment was collected by the nawab's officer partly at the villages, and partly on the produce of the village when brought into town.[2]

Town dues.

The special town dues or *mokat*, introduced by Teg-bakht Khan about the year 1735, were in 1778 estimated to yield a revenue of Rs. 4,26,230.[3] and in 1800 a corresponding amount of Rs. 3,30,040.[4] The articles on which these duties were imposed are, in the accounts for 1800, arranged in three classes: (i) articles paying town dues only; (ii) articles paying customs as well as town dues ; (iii) articles paying a certificate tax in addition to town dues. To the first class belonged articles of agricultural produce charged at rates varying from one to five per cent on grain, and rising to 10.55 per cent on clarified butter, 11.75 per cent on sugar-cane, and 30.10 per cent on tobacco.[5] Under the second class 101 articles are enumerated, chiefly dyes, preserved fruit, and manufactured goods. These, in addition to a uniform customs rate of two and a half per cent, paid town dues for the most part of either two or four per cent. A few articles were charged at much higher rates, such as assafoetida, 8.33 per cent ; myrabolans, 8.82 per cent ; bees'-wax, 10.67 per cent ; clarified butter, 11.87 per cent ; and lac, 30.98 per cent.[6] For the year 1800 the total value of the trade in articles belonging to this class is returned at Rs. 3,83,860 to which coarse cotton-cloth, or *dhotis* contributed Rs. 88,780 ; fine cotton-cloth or *baftas*, Rs. 61,910 dates Rs. 41,000 ; and

1. Surat Papers 51 and 618.

2. Surat Papers, 366. The holders of estates would seem to have had considerable difficulty in recovering their rents. In the village of Umra, the Bakshi could collect his dues only when not interrupted by the Marathas, and that, too, only by sendibg a party of soldiers.

3. Surat Papers, 34.

4. Surat Papers, 356.

5. Surat Papers, 390.

6. Surat Papers, 374-375.

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jingelly oil Rs. 29,580.[1] Under the third class a list of 115 articles of every description is given which, before the levy of town dues, were imported either free, or under a reduced custom rate of three-quarters per cent.[2] The goods privileged to pass at the specially easy certificate rates may be arranged under three heads according as they were imported : (a) through the English, or *lati*, custom-house ; (b) through the nawab's sea, or *furia*, custom-house ; (c) through the nawab's land, or *khuski*, custom-house, (a) On goods imported through the English or *lati*, custom-house, the town dues varied as a rule from one and three-quarters to about three per cent, though pomegrantes and raisins were charged at five per cent, assafoetida at nine per cent, and lac at as much as 46.63 per cent. The total value of the goods imported under this head in 1800 is returned at Rs. 3,37,730, to which cochineal contributed Rs. 1,10,510 and China silk Rs. 93,250. (b) On goods imported under certificate through the nawab's sea custom-house, or *furia*, a certificate tax of three-quarters per cent was charged. With the exception of indigo which paid 4-¼ per cent, the town dues varied from 1¼ to 2¼ per cent. The total value of the articles imported under this head was Rs. 1,70,530 to which *chadars* contributed Rs. 1,27,560. (c) In addition to a certificate duty of three-quarters per cent, the articles imported through the *khuski* or land custom-house were charged with town dues, varying in amount from ¾ to 3¾ per cent. Only in the case of chintz did the town dues levied on goods of this class rise as nigh as five per cent. The total value of the articles imported under this head is returned at Rs. 3,03,860 to which yarn contributed Rs. 2,16,130

Customs, 1759-1800.

During this period customs were collected at Surat in three distinct custom-houses. Of these, two were in the hands of the nawab and one belonged to the English. Of the nawab's custom houses one, called the *furia*, was a sea custom-house ; the other, called the *khuski*, was a land custom-house. The English custom-house was a sea custom-house and was called the *lati*. Here, under the provisions of their charter of 1716, the English were allowed, on payment of a yearly tribute of Rs. 10,000, to pass their own wares free of charge, and to recover dues from merchants who traded as their dependents.[4]

It was at first (1759-1790) the rule for goods brought into Surat, either through the land or sea custom-house, to pay duty, and when again exported to pay duty a second time. Towards

1. Surat Papers, 374-375.

2. The goods to which Moghul certificates were ordinarily applicable are said to have been *dhotis* from Cambay, Ahmedabad, and Gogo silk *patolas* from Patan, silk goods from Burhanpur and Bengal, and various fabrics from Broach. (Surat Papers, 70). The origin of the ¾ per cent tax was that up to 1795 these goods had paid the two *chotras*. They were then freed and the merchants, afraid that the Marathas would stop their trade on account of their loss of revenue, agreed to pay a tax of ¾ per cent, ¼ for the Marathas, ¼ for the nawab, ¼ for the English —Surat Papers, 154

3. Surat Papers, 377.

4. Surat Papers, 61 and 153.

the close of the century (1790-1800) this practice of levying duty twice on the same goods was, in great measure, given up. First, at the English custom-house and afterwards at the nawab's sea-custom-house, merchants came to be allowed, without a fresh charge, to export by sea goods that had already paid an import duty at the same custom-house. One consequence of this privilege was that merchants, having to send inland goods brought into Surat by sea, avoided the land custom-house fees by sending the goods out of Surat by the same custom-house through which they had been imported and then, landing them at some convenient point on the coast, had them conveyed to their destination. Similarly, by a special exemption, piecegoods, the chief article of trade imported into Surat by land, were freed from duty at the land custom-house.[1]

Nawab's rates, 1759-1800.

The same rates were levied at the nawab's sea and land custom-houses. But these rates were from time to time changed and were not uniform, merchants of different classes being charged at varying rates. From 1759 to 1763 the whole amount levied at the nawab's sea and land custom-houses was composed of two items, the regular custom-house charge was recovered from the different classes of merchants according to the following scale : 2½ per cent from Musalmans, 3½ per cent Armenians and five per cent from Hindus ;[2] of the two special cesses or *ekotra*, each of one per cent, one was first levied by Teg-bakht Khan about the year 1746, the other was introduced by the English in 1759 (March 14) to repay the charges incurred by them in the capture of Surat.[3]

Revenue details.

The proceeds of the first cess, levied only on Muhammadans with some special exceptions, and on Hindus, belonged entirely to the nawab;[4] the revenue of the second cess, collected from Armenians as well as from Hindus and from all Muhammadans, was enjoyed by the English. The total charges paid by the different classes of traders were, therefore, for Musalmans 4½ per cent, for Armenians 4½ per cent, and for Hindus seven per cent.

In 1763 (January 4), with the view to equalizing these burdens, Mr. Hodges, the chief of the English factory, arranged that the rates paid by Hindus should be reduced to six per cent, and that those paid by Musalmans should be raised to 5½ per cent.[5] The rates introduced in 1763 remained in force till 1792.

1 Surat Papers, 223.

2 Surat Papers, 231.

3 Surat Papers, 181. This English cess was a revival of a one per cent tax levied in 1752 by the government of Surat to provide funds for the payment of the £ 20,000 promised to the English under the terms of the treaty of that year. This tax was continued till 1758, when the payment of the £ 20,000 was completed.–Surat Papers, 231, 268.

4. Surat Papers, 181. But in Surat Papers, 70, the Marathas are said to have had a one third share in part at least of the proceeds of this cess.

5. Surat Papers, 258.

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English rates, 1759-1800.

Meanwhile at their custom-house the English had been charging their dependent merchants regular custom dues at the rate of four per cent. To this were added two special cesses of one per cent each. Of these cesses, one was first levied to repay the charges incurred by the English during the dispute of 1750; the other was a one per cent convoy duty, making altogether a total uniform rate of six per cent.[1] In 1794 orders were received from England to reduce the rates charged at the English custom-house to 2½ per cent. This change was carried out and in the following year the new rates were extended to the nawab's custom-houses.[2] It was, however, found that the revenues of Surat could not bear so serious a reduction of customs rates, and in 1799, when the whole management of Surat affairs came into the hands of the English, it was found necessary again to increase the customs charges. In 1800, on account of the claim of the Marathas to share in the reveue of the *furia*, or nawab's sea custom-houses, it seemed advisable to maintain the three custom houses charging at each a uniform rate of four percent. To this was added at the *lati* a one per cent fee for marine charges, and at the *furia* and *khuski* custom-houses a one per cent cess, representing the former English war charge abolished in 1794.[3] Of additional charges there was, besides several exactions by the nawab and the officers of the customs houses,[4] a special arrangement in favour of the English. This provision was that as admirals of the fleet they should enjoy the monopoly of providing tonnage for the trade between Surat and the Persian and Arabian Gulfs. This monopoly, which was estimated to be equal to a charge of six per cent on the trade, was abolished in 1795, and in 1800 in its place a special cess of two per cent was imposed.[5]

Revenue details.

Exemptions.

On the other hand, besides the chances of evading full duty, to which the variety of class rates and the rivalry of the two sea-custom houses gave rise, there were certain acknowledged exemptions which greatly lightened the burden of the duties on trade. These exemptions were three in number (i) on goods passed with an English certificate through the English custom-house; (ii) on goods passed with a Moghul certificate, or *dakhla*; on trade conducted under charter, or *farman*, privileges.[6] The practice of allowing special exemptions at the English sea custom-

1. The yearly revenue derived by the English from their custom-house varied from Rs. 1,08,000 to Rs. 1,30,000—Surat Papers, 61.

2. The effect of this change was to reduce the revenue derived from the English custom-house from Rs. 1,29,760 to Rs. 67,570 and the English share in the nawab's customs from Rs. 32,470 to Rs. 19,690—Surat Papers, 271.

3. Surat Papers, 181. On the basis of the trade of the four preceding years the total customs revenues for 1800 were estimated at Rs 2,95,060. Of this, total, *lati* collections were estimated to yield Rs. 1,29,370; *furia* collection Rs. 80,560; *khuski* collections, Rs. 48,380; and the Gulf trade Rs. 36,740. Some particulars regarding this last item are given in the text.—Surat Papers, 276.

4. Under the names of *balloy* and *rezgui*, the nawab and his officers received certain cases and allotments—Surat papers, 238.

5. Surat Papers, 181.

6. Surat Papers, 232.

house was not introduced till 1791, when it was arranged that the payment of customs dues at any one English settlement should pass the same goods free of charge through other English custom-houses.[1] Under this arrangement it was estimated that at Surat, during the four years ending with 1800, goods to the average yearly value of Rs. 29,14,360 were passed free of custom duties and in return that Surat goods valued at Rs. 20,11,100 were exempted at other ports.[2] The court of Delhi had from time to time granted, in favour of certain Musalman merchants, freedom from the payment of customs dues. The average total yearly value of goods imported under these certificates during the four years ending with 1800 is returned at Rs. 8,06,830. Of the whole quantity some paid duty at the rate of 2½ per cent, some at the rate of ¾ per cent and the rest was allowed to pass free of charge. The only merchant who at this time, held a certificate freeing him from the payment of all duty, was Mulla Abdul Fate, grandson of the Mulla Muhammad Ali who (1729-1733) played an important part in the affairs of Surat. In 1800 it was determined that all exemptions under Moghul certificates should cease. It was at that time arranged that Abdul Fate should receive, as compensation for the loss of his privilege, a yearly pension of Rs. 1,000.[3]

European privileges, 1759-1800

During the whole of this period the French, Dutch and Portuguese traders at Surat, in consideration of their charter or *farman* privileges would seem to have continued to trade, paying duty at the rate of only 2½ per cent. From 1759 to 1798, goods belonging to these privileged companies are said to have paid 2½ per cent duty and nothing more.[4] In 1800 the custom-house regulation (No. IX of 1800), then introduced, provided (rule VII, Surat Papers, 233) that the trade of the European nations possessing charters from the great Moghul should in no way be interfered with, nor the existing provisions altered.[5] In accordance with this rule, in the estimates drawn up in 1800 of the probable custom-house revenue Portuguese merchandize is entered as charged 2½ per cent.

Administration of the city, 1759-1800

In the collection and management of the city revenues the powers of the English and of the nawab were well marked and distinct But in the other departments of government, the maintenance of public order and the administration of justice, the functions of the different members of the double government were less clearly defined.

1. Surat Papers, 278.

2. Surat Papers, 282.

3. Surat Papers, 258. Europeans trading under *farman* privileges paid neither Teg-bakht Khan's cess (1746) nor the English war cess (1759). Teg-bakht Khan's cess was levied only on Hindus and on some Muhammadans. The English war cess was levied on Hindus, all Muhammadans, Armenians, and Jews. The expression (Surat Papers, 231) every body was obliged to pay the English war cess, seems to include every Muhammadan.

4. Surat Papers, 234.

5. Surat Papers, 240, 253, 274, 276, 277.

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Maintenance of order.

Trusting to the English to protect the city as well as the castle, the nawabs gradually reduced the strength of the troops employed by them to guard the city walls. In 1759 there are said to have been in the nawab's pay from two to three thousand troops. But by the close of the century the number had declined to 750.[1] In 1800 the nawab's force was disbanded and their posts at the gates of the city were occupied by British troops.[2]

Police.

In matters of police the government of Surat was at this time responsible only for the management of the city of Surat. As early as the beginning of Teg-bakht Khan's rule (1735) the Marathas agreed to make over to him a fixed assignment on the district revenues and from that time his responsibility for the state of the country beyond the suburbs of the city ceased. From this time the *faujdar*, or district police officer, no longer moved about the country round Surat but instead held his court in the suburbs near the Gopi-pool.[3] So disturbed was the country that even in times of peace, in passing (1788) from Surat to Broach, Hove the traveller required a guard of sixteen horsemen. He got safely to Broach. But shortly after, on his return southward, he found the guard-room at the Kim in the hands of a chief of banditti, who waylaid and robbed all who passed. Although, he complains, this was so near Surat, and every person was acquainted with the depredations this bandit practised, no steps were taken to put a stop to them.[4]

Administration of the city 1759-1800

The functionary who was originally responsible for the management of the city in police matters was the *kotwal*. This officer was appointed by the court of Delhi, and with the decline of his master's authority in Surat the *kotwal's* powers were also curtailed. As a check on the *kotwal*, the governor of Surat, when he began to assert his independence (about 1735), appointed a commissioner or *amin*, and with the downfull of the emperor's authority in Surat the nawab's reprsentative entirely superseded the *kotwal*.[5] In the struggles that took place on the death of Teg-bakht Khan (1746-1751), the commanders of the castle established a right to control the city governor in matters of police. And in 1759, when the English became commanders of the castle, they found that this command carried with it the right to appoint a deputy governor, or *naib*, whose chief duty it

1. Surat Papers, 22. The details for 1733 are, besides peons, 1,500 foot and 400 horse, the whole force kept up at a cost of Rs. 1,94,800. (Surat Papers, 25). The details for 1799 are 444 disciplined troops in red, 21 horsemen, and the rest armed peons. Besides this force there would seem to have been about 150 unarmed peons. The whole kept up at a yearly cost of about Rs. 10,320—Surat Papers, 461.

2. Surat Papers, 488.

3. Surat Papers, 359.

4. Hove's Tours, 32.

5. Surat Papers, 360.

was to take charge of the city police.[1] In consequence of the fall in the city revenues, the office of deputy was abolished in 1777 and its emoluments made over to the nawab.[2] The abolition of this office would seem to have been a mistake. The city police became less and less efficient till, in 1795, they were found to be powerless either to suppress the riot that took place in that year, or bring the chief offenders to punishment.[3]

At the close of the century when the entire management of the city was taken over by the English (1800), they found that the city police were, in addition to the station at the city gates, distributed in small posts of one or two men, stationed at the intersection of the principal streets. These men were under the orders of the superintendent or *amin*, and had no fixed wages, being paid by contributions from weddings, caste feasts, Hindu festivals, carts and hay.[4] Under the arrangements introduced in 1800, a body of police 100 strong was raised and placed under the charge of the magistrate who in police matters was made responsible for the management of the city. The pay of the new body of police was fixed at the monthly rate of Rs. 5.[5]

Justice.

The administration of justice was irregular and complicated. The Mahratta tribute collectors and the representatives of the different European trading companies assumed the power of protecting their own dependents and punishing other classes of people.[6] Licensed Liquor-sellers are also said to have confined and punished people of the lower classes who owed them money.[7] While justice at the village panchayat level was fairly cheap, it was undoubtebly otherwise in the courts established by the nawab. The first object of both civil and criminal courts was to draw a revenue from the cases brought before them. In criminal matters fines yielded a yearly revenue of about Rs. 40,000. In civil cases the costs are said to have amounted to one-half of the value of the property under litigation.[8] Besides this, the process of the nawab's courts was most irregular, and matters were complicated by the separate jurisdiction to which, as commanders

1. Surat Papers, 83 and 90. The deputy governor would seem, like the commissioner, or *amin*, to have been first appointed when the governor assumed the title of nawab Besides the charge of the city police, the deputy, or *naib*, held the keys of the sea custom-house, or *furja*, and had power to seal goods and grant passes.—Surat Papers, 40-44.

2. The funds allotted to the deputy had dwindled from Rs. 1,17,940, in the time of Safdar Khan (1751-1757), to Rs. 44,785 in 1777. (Surat Papers, 40-44). At this time (1777), on the subject of police, Parsons (250) says, "the police is in the hands of the nawab. But when the natives think themselves aggrieved, they fly to the English chief for redress, who, when he sees occasion, seldom fails to relieve them by remonstrance to the nawab, which always enforces compliance".

3. Surat Papers, 83.

4. Surat Papers, 183.

5. Surat Papers, 164 and 494.

6. Surat Papers, 137.

7. Surat Papers, 89.

8. Surat Papers, 39 and 137.

of the castle, the English had succeeded.[1] The reform of the administration of justice was one of the measures which, towards the close of the century, the English most pressed upon the attention of the nawab. They proposed that for the whole city one general court of justice should be established. This court was to be under the joint superintendence of two judges, one appointed by the nawab, the other chosen by the English. Appeals were to lie first to the nawab and finally to the Government of Bombay.[2] This proposal was not, however, carried out and under the arrangements completed in August 1800 an officer was appointed who was styled judge and magistrate, vested in the former capacity with civil and in the latter with criminal and police jurisdiction in the city and port of Surat, the town of Rander and their dependencies.[3]

Civil suits would seem to have been decided either by the *amin* or in the two supreme courts. There was finally the religious judge of the Musalmans, the *kaji* in whose office marriages and deeds of sale were registered and before whom, among the lower classes, domestic quarrels and disputes were decided. Under the English the chief or head of the factory exercised two distinct sets of judicial functions. As head of the factory he was, (i) a justice of the peace in matters connected with English subjects; (ii) as commander of the castle he would seem to have had considerable but ill-defined judicial powers. In this latter capacity, the English chief was specially entrusted with the protection of weavers, artizans, and labourers[4] and besides this was according to the custom of the city, bound to hear, and if possible, redress the grievances of any one who came to the flag-staff in the castle green and claimed his protection.[5] As a rule, when such petitions were of the nature of civil complaints, the chief would seem to have referred the question in dispute, in the first instance, to the nawab's brother or to the police commissioner or *amin*; afterwards, should these courts fail to redress the grievance, the chief settled the matter[6] as he thought right. Caste disputes were referred to the heads of the castes.[7] Questions of crime

1. The following are the details of the arrangements for administering justice (1798). Under the nawab there were two chief tribunals, courts of appeal apparently, both in civil and criminal matters. These were : i, the *durbari adalat*, nominaly under the superintendence of the nawab's brother : ii, the nawab's personal court, or *adalat karrai huzuri*. Of subordinate courts there were in criminal matters : i, the city police court, known as the *chebutra kotwali* or *amini*. The powers of the officer in charge of this court were at first only criminal, but afterwards he took cognizance of civil as well as of police matters ; ii, the rural police court, or *faujdari kacheri*. This was also called the Chorasi station or *thana*, and was held at the Gopi-pool by the nawab's brother. In revenue matters there was the paymaster's court, *karrai sarkar bakshi*, a tribunal said to have be oppressive and greatly dreaded. Zafirad Khan, the other chief revenue collector also acted as judge or arbitrator in questions brought before him --Surat Papers 136, 137, 360.

2. Surat Papers, 156.

3. Reg. I. of 1800, Sec. II.

4. Surat Papers, 91.

5. Surat Papers, 123.

6. Surat Papers, 144.

7. Surat Papers, 143.

of which the chief could not take cognizance as a justice of the peace, were referred for settlement to the nawab's criminal courts.[1] In 1796 petitioners would seem to have been prevented from applying for redress to the English chief. A proclamation was accordingly issued stating that the chief was at all times ready to hear complaints and a gong was hung up in front of his dwelling for petitioners to strike when they wanted to attract attention.[2]

Products of Surat 1759-1800.

With regard to the produce and manufactures of Surat, it would seem that in spite of the disordered state of the province the lands at least in the neighbourhood of the city were (1772) highly cultivated. The fields, generally enclosed by hedges and fringed by lines of mango and tamarind trees, besides wheat, rice, millet, and other Indian grains, yielded crops of cottton, hemp, tobacco, plants for dyeing, and a variety of seeds for pressing oil. The gardens produced cabbages, cauliflowers, peases, Frenchbeans, artichokes, asparagus, potatoes, carrots, turnips, lettuce, and salads in abundance and perfection, besides a variety of indigenous roots and vegetables.[3]

Though the manufactures of Surat are said (1789) 'not to be compared to those of the towns of northern Gujarat,[4] they were of considerable importance. Its brocades according to Parsons (1777) were the best of their kind, very beautiful, with gold and silver flowers of various patterns on a silk ground.[5] Surat was also famous for its coarse and coloured cottons, while Navsari vied with Broach in the fineness of its muslins. The provinces near the city, says Neibuhr (1763), "are full of manufactures of all sorts."[6] Surat still continued famous for its most elegant targets.' of rhinoceros' hide. The skin was brought over from Arabia and polished in Surat till it shone like tortoise-shell; it was then shed with silver nails, whose heads were full an inch in diameter and curiosly wrought. The targets sold at from £ 3 to £ 5 each. Arabia was the chief market for the shields, where every man who could afford to purchase one would not go without.[7]

Ship-building, 1759-1800.

Surat ship building was at this time an important industry. Many of the ship-builders were Parsis.[8] The yards were places like graving-docks, hollowed out on the bank of the river. While

1. Surat Papers, 143. 2. Surat Papers, 144.

3. Forbes' Or. Mem., I. 269. Stavorinus (1774) praises the industry of the Surat cultivators, 'scarcely a piece of uncultivated ground is to be seen' (II.453). Besides the crops mentioned by Forbes, he notes tobacco, and praises the wheat, which was sometimes sent to Batavia (II. 455). The tobacco, according to Parsons (1777), was dried with great care, and became of a beautiful colour and a most agreeable fragrant smell. (Travels 258). This tobacco was sent from Surat to Mocha.—(Travels, 284).

4. Surat Papers, 22. 5. Parsons, 261.

6. Neibuhr, in Pinkerton, X., 216.

7. Parsons, 272. 8. Ham. New Act, I. 161.

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the ship was under construction these ships were closed towards the river by an earthen dam. When the work of building was completed the dam was taken away, and the water coming in floated off the ship. In 1777 Stavorinus speaks of a ship being built in the English yard about 100 feet long, and costing Rs. 75,000. Though they were dear to build, the Surat ships were valuable for their great endurance, being able to navigate the sea for a hundred years.[1] The largest ships were those engaged in the China trade. These varied in size from 500 to 1,000 tons burden. Those that sailed to Arabia and Persia were smaller.[2] Except for certain peculiarities in the details of construction, the Surat ship-builders, both in the form of the ship and in the style of rigging, would seem to have closely followed European models. Stavorinus describes one of the ships, a vessel of 135 feet in length, as built like a frigate with three masts and cut away full as sharp at the bow as a European ship.[3] The stern was said to have originally belonged to an English ship and was like the pictures of seventeenth century vessels. It had two decks, likewise a quarter-deck and a forecastle. The gun-room was very large, but the height between decks was scarcely five feet. The cabin was adorned with a great deal of carving and not the least piece of wood was left without some foliage or imagery. Upon the quarter-deck were little huts or cabins, and in front a large awning. The bowsprit was fixed at the right side of the stem. The builders of these ships would seem to have chiefly been Parsis, and their owners residents of Surat. At the same time their captains and officers were (1777) English. They traded under English passes, and flew English colour.[4]

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1. Stavorinus tells of a ship called the 'old ship' in 1702, which up to 1777 made a yearly voyage to the Red sea. (Voyages, III., 17-23). Compare also Neibuhr in Pinkerton, X, 215, and Forbes' Or. Mem, I, 146.

2. Parsons, 261.

3. Neibuhr (1763) says "the Indians are in ship-building servile imitators of the Europeans". (Pinkerton, X, 216). But Stavorinus, with a practical knowledge of the subject, notices several peculiarities. Of these the chief were that most of the timbers were fitted in after the planks had been put together. In placing the planks great care was taken. When the edges of a plank fitted exactly in their place, they first rubbed a glue, which by age became as hard as iron, and then covered with a thin layer of canoe. After the canoe had been applied, they united the planks so firmly and closely with pegs that the whole side seemed a single piece of timber. To preserve them from the salt water, the sides of the ships were occasionally smeared with wood oil. Their bolts were peculiar, of country iron, very tough, and flexible. As to the riggin the masts were generally made of *pun* wood (Calophyllum Angustifolium) from the Malabar coast Except the cables for which coir was much esteemed, the cordage of all good ships came from Europe. For sails coarse cotton cloth, or *doti*, served well, for, though not so strong and lasting as canvas, it was more plaint and less apt to split. The anchors were mostly European.—Stavorinus, III 17-23.

4. Parsons, 261. During greater part of the time the English had the monopoly of providing tonnage for the Arabian and Persian trade. They hired ships from ship-owners and relet them to merchants, and it was from the balance of profit that the English 'chief' at Surat was paid. (Surat Papers, 77-78). In 1798 this monopoly was abolished (Surat Qapers, 79), and in 1799 besides English ships seventeen vessels were employed in the Gulf trade, of which one belonged to the nawab, six to the English, and the rest to Arab merchants.-Surat Papers, 257.

Sea trade, 1759-1800.

The chief articles of sea trade were (1779) imports, of European goods[1] and hardware brought by the English, Dutch, and Portuguese ; copper, silk, lac, tea, sugar, porcelain, and spices from Bengal, China, and the Dutch settlements ; ivory brought by the Portuguese from Africa ; and European goods, bullion, coffee, and dates from Arabia and Persia. The exports were, to Arabia and Persia, the richer kinds of silk and cotton goods and indigo ; to Africa, cotton, indigo and piece-goods ; to Madras and Bengal, cotton to China, cotton and drugs, and cloth, cashmere shawls ; and small quantities of cotton to Mauritius and Europe.

Surat, which in 1763 is called the store-house of the most precious productions of Hindustan,[2] and in 1777, was still the port through which the greatest trade of any kingdom in Hindustan

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1. European goods.—Under this head came coral, amber, glass-beads, brass and iron wire, brass plates, needles, looking-glasses, toys, and trinkets. Much of the ware was from Venice. The chief route by which articles of this class were imported was by Scanderron, Alleppo, and Basra. (Parsons (1777) (261). *Bullion*. Under this head gold and silver, both coined and uncoined, were imported. Of the coins there were (1774) Venetian sequins, worth Rs. 4-¼, German Dollars Rs. 4-1/8 Turkish gold pieces, Rs. 3, and silver coins from Persia. (Stavorinus, III. 8). *Cotton cloth*.—This was the staple export, chiefly coarse and coloured, though fine, checkered, and white wares also came from Broach. (Parsons, 261). *Cashmere shawls*.—According to Parsons, the fine wool used int heir manufacture was imported through Surat from the coast of Caramania between the Indus and the Persian Gulf. The shawls were again exported through Surat (262). Of the chief varieties of silk and cotton cloths, the following particulars have been preserved by the Abbe Raynal (1780) ; The goods more commonly known are (1) *Dutties*, a kind of coarse unbleached cloth, worn in Persia, Arabia, Abyssinia, and the eastern coast of Africa ; and blue linens, which are disposed of in the same manner, and are likewise sold to the English and Dutch for their Guinea trade. (2) The blue and white checks of Cambay, which are worn for mantles in Arabia and Turkey ; some are coarse, and some fine, and some even mixed with gold for the use of the rich. (3) The white linens of Barokia (Broach) so well known by the name of baftas. As these are extremely fine, they make summer caftans for the Turks, and Persians. The sort of muslin with a gold stripe at each end, with which they make their turbans, is manufactured at the same place (4) The printed calicoes of Ahmedabad, the colours of which are as bright, as fine, and as durable as those of Coromandel. They are worn in Persia, in Turkey, and in Europe. The rich people of Java, Sumatra and the Malacca islands, make head-dresses and coverlets of these chintzes. (5) The gauzes of Bairapour (Burhanpur). The blue ones are worn by the common people in Persia and Turkey for their summer clothing, and the red ones by persons of higher rank. The Jews, who are not allowed by the Porte to wear the white, make their turbans of these gauzes. (6) Mixed stuffs of silk and cotton, plain, striped, some with satin stripes, some mixed with gold and silver. If they were not so dear, they would be esteemed even in Europe for the brightness of their colours, and the fine execution of the flowers, though their patterns are so indifferent. They soon wear out ; but this is of little consequence in the seraglios of Turkey and Persia where they are used. (7) Some are of silk, called *tapis*. there are *pangnes* of several colours, much esteemed in the eastern parts of India. Many more would be woven, if it had not been necessary, to use foreign materials, which enhance the price too much. (8) Shawls, very light, warm, and fine cloth, made of the wool of Cashmere. They are dyed of different colours, striped and flowered. They are worn for a winter dress in Turkey, Persia and the more temperate parts of India. With this fine wool turbans are woven that are ell-wide, and a little more than three ells long, which sell for as much as thousand crowns (1251). Though this wool is sometimes manufactured at Surat the finest works of this kind are made at Cashmere.—II, 39.

2. Neibuhr, In Pinkerton, X, 216.

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passed,[1] had before the end of the century lost great part of its commerce.[2]

Sea trade, 1759 to 1800.

With the exception of the English, the trade of the European settlers at Surat during the latter half of the eighteenth century almost entirely ceased, the great export of cotton wool to China and Bengal, which (1777) employed, on an average, more than thirty ships of from 500 to 1,000 tons apiece,[3] would seem at the close of the century to have declined in amount and to have been transferred to Bombay.[4] The trade to Arabia and Persia also suffered. The exports, estimated in 1789 at about £ 100,000 are at the close of the century valued at but little more than half of this amount. With reagrd to the total value of the sea trade of Surat at the close of the eighteenth century, it would seem from statements drawn up in 1800, when the management of the trade of Surat passed into the hands of the British, that during that year the total value of export and imports amounted to Rs. 35,65,841.[6] During that year there were in all thirty-eight articles imported or exported, whose total estimated value was over Rs. 15,000. Of these, seven were over £10,000 ; nine between £10,000 and £5,000 ; eight between £5,000 and £2,500, and fourteen between £ 2,500 and £1,500.[7]

1. Parsons, 261, 262.

2. The causes of the decline of Surat trade have been mentioned above. The extent of the decline appears from the custom-house figures. In 1759 the customs yielded a revenue of Rs. 2,56,500; this by 1796 had fallen to Rs. 80,000 and in 1798 (with rates reduced to about one-half) to Rs 39,000. Surat Papers, 153 and 164.

3. Parsons (1777), 261.

4. For the decline in the amount of cotton exported, see Surat Papers, 52, where (1797), it is said that the sub-division of Chorasi alone would yield as much cotton as the company usually invested.

5. Surat Papers, 22 and 256. The exports (1800) are to Persia, Rs. 2,80,000 ; to Arabia Rs. 3,70,000 ; total Rs. 5,90,000.

6. This total is made up of the following items .

	Rs	£
Articles subject to customs dues only	8,69,377	86,938
Do. to certificate dues only	15,00,479	150,048
Do to customs and town duties	3,83,863	38,386
Do. to certificate town duties;...	8,12,122	81,212
	35,65,841	356,584

(Surat Papers, 374, 384) to this must be added the trade that paid only town dues.—Surat Papers, 390.

7. Surat Papers, 374, 389. I. The seven articles whose estimated value was over £10,000 were : ivory, £31,228 ; yarn £21,613 ; sugar £18,208 ; copper £17,018 dollars, £16,420 ; chadars £12,756 ; cochineal £11,051 . II. The nine articles whose estimated value was between £10,000 and £5,000 were : shawls £9,526 ; fine cloth or *baftas* £9,331 ; China silk £9,325 , sugar £9,155 ; white coarse cotton cloth or *dhotis* £8,278 ; betel-nut, £8,108 ; cutnis £7,210 ; palanpurs £6,254; silk cloth, or *elaicha* £6,086. III. The eight articles whose estimated value was between £5,000 and £2,500 were ; cotton cloth or *dupatas* £4,837 ; jingelly oil £4,708 ; iron £4,625 ; cass £4,430 ; dry dates £41,120 ; red lead £3,950 ; cloves £3,228 ; betel leaves £2,826. IV. The fourteen articles whose estimated value was between £2,500 and £1,500 were ; piece-goods £2,465 ; chaya root (a dye) £2,450 ; silk scarfs or *lungis* £2,255 ; chintz £2,245 ; pepper £2,156 ; sugar-candy £2,036 ; tortoise-shell £2,031 ; turbands £1,865 ; castor-oil £1,856 ; clarified butter £1,807 ; *patolis* (silk-cloth) £1,596 ; women's robes *salls* £1,576 wet dates £1,567 ; raw silk £1,551.

Land trade, 1759-1800.

The land trade at Surat in the latter part of the eighteenth century would seem to have chiefly lain along two routes,–to the towns of northern Gujarat, and through Khandesh, southward to the Deccan, Aurangabad, and Haidarabad, and northward to Malwa, Indore, and Ujjain. To northern Gujarat the chief exports were molasses, sugar, and cocoanuts sent in return for the muslins of Broach, and the silks and calicoes of Ahmedabad and Patan.[1] Eastward along the Tapi valley would seem to have been exported brocades and other silk articles, the manufacture of Surat.

Merchants.

The merchants, of Surat were Hindus, Musalmans, and Parsis.[2] Of foreign Asians, Georgians, Persians, and Arabians ; merchants from Malacca, China, Abyssinia, Madagascar. Mozambique, and the Comoro[3] islands are mentioned (1774) as resorting to Surat.[4]

Europeans in Surat, 1759-1800.

The chief European traders were, as before, the English. Dutch, French, and Portuguese. But, in addition to these, mention is made of Danes, Swedes and Germans.[5] In 1759 a Danish ship arrived at Surat and the captain, doing good service to the English, accomplished his business very much to his advantage.[6] Between 1746 and 1765 three ships of the Swedish East India Company visited Surat and for a time a factory was

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1. Surat Papers 259. Other northern Gujarat local trade centres in communication with Surat were Ankleshwar. Baroda, Dabhoi, Coral, Sinor, Sadra, and Jambusar. Surat Papers, 259.

2. With regard to the character of the merchants of Surat, and the inner working of its trade, Abbe Raynal (1780) says, that when Europeans hardly suspected that commerce was founded on any certain principles, these principles were already known and practised in Surat. Money was to be had at a low price and bills of exchange might be obtained for every market in India. Insurances for the most distant navigations were very common. Such was the honesty of these traders that bags of money, ticketed and sealed by the bankers, would circulate for years without even being counted or weighted. (Abbe Raynal II., 29). This estimate was perhaps partly based on Neibuhr's statement that (1763) the Hindu merchants were distinguished for their honesty and the Parsis for their skill (Pinkerton X, 214). Men better acquainted with the actual state of affairs in Surat would seem to have drawn very different conclusions. In 1797, a committee, appointed by the Bombay Government, to inquire into the state of trade at Surat, report, among merchants a very general neglect of agreements, and even of written obligations, producing a total want of confidence between man and man.' Bankruptcy, they complain, was not unfrequently a premeditated scheme to defraud creditors. (Surat Papers, 90). At the same time, in forwarding this report to the Bombay Government the head of the English factory dissented from the opinion of the other members, holding that 'Knawish tricks and chicane' were the work only of the lowest class of the people. (Surat Papers, 145)

3. Comoro islands (S. Lat. 12° E. Long 45°)--Mohilla, Moyatta, and Johanna --lying between the north point of Madagascar and the main land. The trade with these islands was small. Milburn (1806-1812) says, occasionally piece-goods are imported in vessels from Surat. The returns are made in cowries, red betel-nut, dammer, wax, cocoanuts and corn.--Milburn, Or. Com. I., 77.

4. Forbes (Or. Mem. I. 146) ; Neibuhr, in Pinkerton, X. 214.

5. Forbes' Or. Me. I, 146 makes a casual reference to Greek merchants.

6. Neibuhr (1763), in Pinkerton, X, 216.

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maintained in the city.[1] In 1777 (September) a ship bearing the standard of the Austrian empire arrived at Surat from Leghorn. Failing to dispose of its cargo the ship sailed to Gogo, and the imperial company of Trieste made no second attempt to establish a trade at Surat.[2]

Europeans in Surat, 1759-1800. The English.

Their command of the city improved the position of the English as traders. As early as 1673, Niebuhr noticed that to all appearance the English must soon engross the whole commerce of the city;[3] and at the close of the century, when the trade of their former rivals had almost entirely ceased, the English were said to procure cloth to three times a larger extent than they ever did before.[4]

During the greater part of this period English affairs at Surat were administered by a chief and council of four, namely, a collector, a customs master, a commercial resident, and a civil paymaster, together with three assistants, or a total staff of eight officers. About 1795 the court of directors sent orders that a commercial board should be constituted at Surat. To this board, besides the chief as president and the commercial resident, one additional member or deputy resident, and three assistants were appointed.[5]

The Dutch.

In spite of the decay of the spice trade, the Dutch were at the beginning of this period(1759)the most powerful of the European settlers in Surat.[6] But on the ascendency of the English the

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1. Macpherson, 310 ; and Briggs' cities of Gujarashtra, 32. The Swedish East India Company was started on the failure of Ostend Company (1727). It worked well till the close of the eighteenth century, when the disturbances in Sweden put a stop to its trade. Neibuhr (1763) tells of a Swedish captain who came to Surat between 1759 and 1763. He sold his iron and copper well. But the nawab demanded a sum of Rs 1,00,000. This the captain refused to pay. He was placed in confinement, but in the end was let off with a fine of Rs. 20,000.

2. This expedition was under the management of an Englishman named Bolts who, formerly in the service of the English company, had become a subject of the empress Maria Theresa. After having disposed of his cargo at Gogo, with the object of obtaining leave to start a trading station at one of their Maratha ports, Bolts, went to Poona. The Poona government granted his wishes, and after establishing three factories in Malabar, Bolts returned to Europe. But the company never succeeded, and in 1785 was declared bankrupt - -Macpherson, 313-317.

3. Pinkerton, X, 215.

4. Surat Papers, 459.

5. Surat Papers, 14.

6. The friendship of the Dutch and the Siddi commander of the castle was one of the chief difficulties in the way of the establishment of English power at Surat. the Dutch, with the object of getting the castle into their own hands, are, in 1759 said to have arranged with the Siddi that the Sdidi should seize and carry into the castle the Dutch brokers. Then the Dutch chief was to send a strong detachment the ot castle to rescue the brokers. On the arrival of the Dutch, the Siddi was to open the castle gates, admit their troops, and make over the castle to their Commander. No steps were taken to carry out this plan, and Stavorinus hints that the scheme failed because the Dutch director was bribed by Mr. Spencer the English chief.—Stavorinus, III. 122 (for reference see page)

decline of the Dutch quickly followed. In 1762 their factory was besieged by the nawab, and ultimately they were compelled to send away their cannon, pay a fine of Rs. 90,000 and move their head-quarters from the old factory witin the city to the wharf still known as the Dutch wharf or Walanda Bandar.[1] In their new quarters they at first kept up considerable state. Parsons (1777) describes them as having a battery mounted with twenty cannons, a company of soldiers, and a factory which, with its flags, made a grand appearance. And besides their business-quarters outside of the Mecca gate, they had an elegant country-house' with a 'rich and charming garden.'[2] In 1788 the Dutch house is spoken of as the healthiest of all the European factories, undoubtedly because of the great cleanliness in it.'[3] But during these years their trade kept steadily falling off and only a few months after Parsons visited Surat, with the exception of two small ships, the naval establishment was abolished ; the military force reduced from one hundred to fifteen ; the horses and elephants, the chariots of ceremony, and palanquins with trappings of gold and silver, formerly furnished at the expense of the company, were all disposed of. The gold and silver ornaments, the plate valued at Rs. 30,000 were carried to Batavia and little or no appearance of pomp was any longer kept up.[4]

About two years after (1780) a correspondence was intercepted showing that the Dutch chief at Surat had engaged in a plot to assist the Marathas to surprise Surat castle. Measures were taken to prevent the Dutch again attempting to interfere in the politics of the city and from this time, though they continued to maintain their factory till after the close of the century, the Dutch ceased to have any importance at Surat. In 1794-95 the total value of their trade was estimated at Rs. 3,11,400[5] and in 1799 they are spoken of as having no active influence.

1. Stavorinus, III, 127. This is the plot of ground, about seven or eight acres in extent, that was ceded to the Dutch, partly as a purchase, partly as a gift under the terms of their charter of 1729, (Stavorinus, III, 101). In 1775 it was covered with buildings, except for about 240 yards along the river, where a stone wall had been erected four feet above the level of the ground. In the wall were two gates, and in front of each a pier-head jutting into the river, where goods were discharged and shipped, and vessels lay afloat. It was afterwards found necessary to build wooden piles in front of the wall toward off the force of the stream.—Stavorinus, III, 158, 160.

2. Parsons (1777), 252, and Neibuhr (1763), in Pinkerton, X, 212.

3. Hove's Tours, 179.

4. Stavorinus, III, 150. At this time (1776) the total European strength of the Dutch factory was returned at 62 souls. Of these 30 were in the civil service of the company, one was a clergyman, two were surgeons, 4 marines, and 25 soldiers. In the following year (1779) the profits of the factory are returned at £18,000. The imports were 1,715,718 lbs. of sugar, 20,002 lbs. of cloves, and a small quantity of nut-meg and mace. The exports were gamboj, cotton-yarn, and cotton cloth. In 1778 Indian cloth was sold in Holland to the value of £23,636. Stavorinus, III, 116.

5. Surat Papers, 266. 6. Surat Papers, 170.

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Of the constitution of the Dutch factory and of their way of conducting business, Slavorinus supplies the following particulars.[1] Under the director were two councils, one general, the other judicial. The general council consisted of the director as president, the senior merchant as second, the merchant fiscal, and six junior merchants. Except that the president took no part in its proceedings, the council of justice was constituted in the same way as the general council. Under the members of council were book-keepers, a comptroller of equipment, a surgeon and a purveyor. Of the members of the native establishment the chief were the brokers.[2] Next in importance to the brokers came the money changer, an officer so much trusted that, under cover of his seal, bags containing £100 in silver (Rs. 1,000) passed unchallenged from hand to hand. For providing the supply of cloth the Dutch, like the English, handed patterns to persons styled 'furnishers' or contractors. These men, during the rainy months, settled with the weavers for the preparation of the cloth. When the yearly supply was ready, the furnishers took the cloth to the Dutch lodge in the city. It was there tested, and such pieces as did not agree with the pattern, or were faulty, were returned to the contractors.[3]

The system adopted by the Dutch company for the payment of their servants at Surat was, for the chief officers, a percentage on all the business that passed through their hands and for the lower officers, what savings they could make out of the grant assigned for the support of their office. The common servants, soldiers, sailors, and artizans, besides allotments of pepper, firewood, salt, vinegar, and oil, received pay at the rate of about 8d. a day.[4] Even more than the English, the Dutch company, 'that the Indian might hold them in respect,' spent large sums of money on 'grandeur and ostentation.'[5] Their director moved out in state with one or two elephants, a certain number of horses, chariots of ceremony, and palanquins with trappings of gold and silver. In the factory the common table was adorned with various ornaments and services of gold and silver plate to the value of Rs. 30,000.[6] Unlike the English the Dutch factors would seem to have been generally married. Perhaps one consequence of the large number of ladies in the Dutch factory was the frequency of disputes on questions of precedence. So bitter did these

1. Staviorinus, III, 150-156.

2. Originally both the brokers were Wanias. But, about 1740, their honesty was suspected, and one of them dismissed. In his place, that each brokrer might act as a check on the other, a Parsi was chosen. But this device seems to have failed, as Stavorinus (1774) found the brokers 'as confidentially connected together as if they were not alone of the same religion, but also own brothers.' Stavorinus, III, 154.

3. Stavorinus, III, 156.

4. 10 stivers, 30 stivers going to one rupee.—Staviorigus, III, R.

5. Stavorinus, III., 148.

6. Stavorinus, III., 149.

disputes become that in 1755 rules were passed laying down not only the rank of each of the company's servants, but for the men which of them might have a velvet coat and who might wear gold lace ; and among the women, settling the number of their attendants, the value of their jewellery and the quantity of gilt and paint they might put on their children's chaises.[1]

The French.

After the union of the different French trading companies[2] in 1719, they for some time carried on considerable commerce at Surat. Like the Dutch and English, they had a factory in the town, and a garden, called Bel-air on the river bank, a little to the west of the outer wall. But with the ascendancy of the English at Surat (1759) and their victories over the French in Southern India, so low did the credit of the French fall that, in 1764, the head of their factory is said hardly to have found the means of a scanty subsistence.[3] In 1769 the company was deprived of its monopoly and their chief was now called consul and appointed by the king of France. Their general trade was of very little importance; and so entirely were they under the power of the English that they (1774) were forbidden to hoist a flag at their factory and were forced to clear away a flight of steps from the garden-house on the bank of the Tapi to the edge of the river.[4] In 1778 it was found that the head of the French factory was assisting, by his counsel and funds, the adventurer St. Lubin. Orders were issued for the consul's arrest. He and the whole staff of Europeans were for a time kept as prisoners of war in their garden at Surat. But here, too, they continued to intrigue and were therefore transferred to Bombay[5] and until the close of the eighteenth century the French factory at Surat was not again re-opened.[6]

1. The Dutch factors would seem to have carried into their private entertainments the same minute attention to matters of etiquette. "Above all things", says Stavorinus, "the master of the house must attend to the seating of every guest, and drinking their health in the exact order of precedence." Especially was this necessary when ladies had been asked, for they are' peculiarly prone to insist upon every prerogative attached to the station of their husbands. Some of them, if they conceive themselves placed a jot lower than they are entitled to, will sit in sullen and pround silence for the whole time the entertainment lasts.'—Stavorinus, I., 302 and 304.

2. Four French companies were united in 1719—The Senegal, The West India, the East India, and the China.

3. Neibuohr, in Pinkerton, X, 216, Anquetil de Parron (In Surat from 1758 to 1761) confirms this, stating that for several years before 1758 the factory at Surat had received no funds from Pondicherry, and that the chief, Anquetil's brother, had difficulty in supporting himself. (Kawasji's Translation, 39). The Capuchin friars, who had been settled in Surat for more than one hundred years, were generally beloved and respected in Surat, and out of respect to them, the French nation were still held in esteem.

4. Stavorinus (1774) III, 70 and Parsons, (1777) 252.

5. An Account of Bombay (1781) 170.

6. Surat Papers, 22. Their garden was taken by the English on the declaration of war. (1793).

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The Portuguese.

In 1764 the affairs of the Portuguese at Surat were in almost as bad a state as those of the French.[1] Some years after this, their trade for a time improved[2] and in 1777 more respect would seem to have been shown to them than to the French, as they were allowed to hoist a flag at their factory.[3] During the last four years of the century the average yearly value of their trade was returned at Rs. 6,21,000.[4] The Portuguese trade consisted of the import of Chinese and European goods and the export of raw cotton, 'the most staple article for the China market.' The course of trade was for four or five large ships to come from Goa to Surat in November and December, and after calling at Diu and Daman. return in the beginning of the year to Goa. Here they completed their cargoes and sailed for China in March and April or at least, some time in May.[5]

English management, since 1800, Form of administration, 1800.

On the assumption of the entire government of the city by the British (1800), the establishment of chief and council was abolished. In their stead the management of the city was entrusted to three officers, a collector of revenue, a judge and magistrate, and for the discharge of political duties a lieutenant-governor.[6] In 1803 the title of lieutenant-governor was changed into agent of Government at Surat.' In 1806 the designation of chief was again adopted and continued till, in 1822, the head officer was styled 'agent to the governor', a title which continued to be maintained for a number of years. With some inevitable alterations in their functions, the offices of judge and collector have continued to exist to the prsent day (1959).

Acquisition since 1800.

The Nawabs of Surat, 1800-1842.

By the arrangements introduced in 1800, the English were put in possession of the towns of Surat and Rander, yielding an estimated yearly revenue of Rs. 8,09.350.[7] Under the agreement of 1800 the nawab was entitled to a yearly allowance of Rs. 1,00,000 together with a one-fifth share of the annual revenues of the city, after deducting the nawab's allowance, the sums

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1. Carsten Niebuhr, in Pinkerton, X. 216. One relic of their former power remained in the use of a corrupt Portuguese as the language of trade.

2. Carsten Niebuhr, in Pinkerton, X, 213 and 216.

3. Parsons (1777) 252. On the other hand, Stavorinus (1774) says, "though the first Europeans established at Surat, the Portuguese are, at present (1774), least in power and respect "—Stavorinus, III. 70

4. At 2½ per cent. it yielded a revenue of Rs. 15,526. Surat Papers, 276

5. Parsons (1777), 243.

6. Surat Papers, 183. Details of the powers and positions of these officers, as well as of the modifications introduced from time to time in their functions, will be found in Chapter VIII, 211. No change was at this time made in the arrangements for providing the companies' investment. The commercial board was continued, the lieutenant-governor acting as president- Surat Papers, 414.

7. Surat Papers, 424. Besides the lands of which they were put in possession, the right of collecting the *Moglai*, or nawab's share of the duties levied on articles imported by iand, and of stationing guards for the security of the collecting posts, gave to the British through the country within about fifty miles of the city of Surat a considerable degree of local influence.—Letter of the Bombay Government, dated Aug., 1st 1800. Surat Papers, 172-173.

payable to the Mahrattas and the charges of collection.[1] His lands extended over 1,500 acres, with 300 cultivators. He had 200 armed attendants and 300 domestics and slaves.[2] In 1818, instead of the variable allowance of one-fifth, the nawab agreed to accept an annual provision of Rs. 50,000 raising his total yearly receipts to Rs. 1,50,000. The nawab died on the 23rd September 1821 and was succeeded by his son Mir Afzul-ud-din, on whose death on August 8th, 1842 without male issue, the titular dignity and office were made extinct. A provision of Rs. 52,800 was settled on his son-in-law, Jafar-Ali Khan, and two grand-daughters. The pension was in 1857 raised to Rs. 1,00,000 with the stipulation that it was to be enjoyed till the death of the survivor of the three grantees. Jafar Ali Khan died on the 21st August, 1863.[3] On the death of the Nawab in 1842, the fleet and commodore of the station were recalled to Bombay and the Delhi flag which had till then continued to fly on the castle, was taken down.[4]

Chief events since 1800.

Since they come under the charge of the British, the lands of the district were more or less free from any attack from without or from any general internal disorder. On only four occasions (in 1810, in 1844, in 1846 and in 1860) was the public peace broken ; and once only (1810) was there been any considerable disturbance.

Musalman disturbance, 1810.

In the beginning of 1810 in the east of the Surat district, a Musalman, Abdul Rehman by name, proclaiming himself the Imam Mehdi, collected a band of followers, chiefly cultivating Bohoras of the Sunni sect. Advancing against Mandvi, then the seat of a small Hindu chieftain, the insurgents captured the fort of Mandvi and made prisoners of the chief and his vazir. The chief effected his escape from confinement but the vazir was killed.[5] Establishing himself in a mosque in the town of Bodhan, about twenty miles east of Surat, Abdul Rehman, the leader of the revolt, sent (January 10th and 15th) two letters to Mr. Crowe, the British chief at Surat, one calling upon him to pay a sum of Rs. 300 and the other advising him to embrace the Musalman faith. During this time number of Musalmans from Surat had left the city to join Abdul Rehman. Others who remained behind in Surat assailed the Hindus with cries of *din*, and there seemed every reason to suppose that an attempt

1. Surat Papers, 445.

2. Clune's Chiefs of Western India, quoted in Briggs' Cities of Gujarashtra,

3. Aitchison's Treaties, VI. 217. Aitchison's. Treaties VI, 217. The papers regarding the succession to the nawab's estate have been printed. (Blue Book).--Nawab of Surat Treaty Bill. 1856.

4. Briggs' Cities of Gujarashtra, 101.

5. His name was Sukhanand. Subesequently a temple was built in memory of Sukhanand Vazir at Mandvi (page 106 revised lists of Antiquarian Remains in the Bombay Presidency Archaeological Survey of India).

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would be made to bring about a revolution in the city. Under these circumstances, Mr. Crowe determined (January 18th), if possible, to seize Abdul Rehman. With this object he arranged that four companies of infantry should be sent to put down the rising and that two troops of cavalry should start in advance and invest the village of Bodhan. The dragoons reached Bodhan about daybreak on the 19th and before the infantry came up a furious engagement took place between the cavalry and Abdul Rehman's followers. Nearly two hundred of the insurgents were left dead on the field, and of the troops a corporal, two privates, and several horses were lost. On the arrival of the infantry the attack was renewed, and Abdul Rehman and many of his followers were slain. With the death of the leader the religious disturbance ceased. It was during this incident that Dhanjisha Barjorji volunteered to accompany the English detachment in the capacity of a local agent. He was among the first to cross the river and while endeavouring to talk over to the infatuated Abdul was killed.[1] At the request of the Mandvi chief who had meanwhile escaped from confinement, English troops were sent to Mandvi. The fort was recovered (January 22nd) and the authority of the chief restrored.[2] A few years later (1818) it was again necessary to send troops to Mandvi. Durjansing, the chief who had been restored in 1810, died without male issue in 1814. He was succeeded by his cousin Hamirsing who in 1817 formed the design of handing over his territory to the Peshwa. British troops were therefore moved towards Mandvi and, intimidated by their approach, the chief dismissed his advisers and for the future agreed to make no change in the administration of his affairs without the knowledge and consent of the British Government.[3]

Riots in Surat.

In the city of Surat the people more than once resisted by concerted mass action the introduction of disagreeable measures by the Company's Government. Of these, the first occasion was in 1844 (August 29th), in consequence of the introduction of a new duty upon salt.[4] Early in the morning of the 29th August, placards were posted about the town calling on shop-keepers to shut their shops. An invitation by the authorities to all heads of castes to come to the court-house and state their grievances to the judge was disregarded. Shops remained closed and the

Salt riot, 1844.

1. The British Government generously granted Dhanjisha's widow Jivibai a pension of three thousand rupees a year. (Edalji Dosabhai : History of Gujarat page 246-247).

2. Briggs' Cities of Gujarashtra, ap. B.

3. Aitchison's Treaties, VI., 257. Nothing further of importance happened in connection with Mandvi. Hamirsing, dying in 1834, was succeeded by his son Wajesing who was killed on the 19th October 1838 by an explosion of fireworks. On the death of Wajesing's posthumous son (1839, December 13th), the direct line of succession became extinct, and the state was annexed.—Aitchison's Treaties, VI, 254.

4. Under the provisions of Act 16 of 1844.

crowd mustered about 30,000 strong in front of the Adalat. An attempt to bring about a settlement through negotiations with some of the prominent *shetias* and *sawcars* were not successful and only the appearance of the military on the scene induced the crowd to disperse sullenly by 5 o'clock in the evening. There were however occasional cries of 'Ghano zooloom' (much oppression)[1] from different parts heard by the officers who rode through the town.

On the 30th again about three o'clock in the afternoon a large body, assembling in front of the court-house, began to pull down fences, tear tiles from the roofs of the out-houses, and attack the court-house in a ferocious and determined manner.' It became clear that the disturbances were of a more serious nature. Instead of a common riot confined to one class of persons it was of the nature of a wide spread insurrection. About this time. when matters had gone so far that the judge had applied to the officer commanding the station for military assistance. some European gentlemen. headed by the district magistrate, made their appearance and the attack on the court-house ceased. Th rioters. however. refused to withdraw. At sunset a proclamation was issued. warning them that if they did not, within one hour's time, return to their houses, the military would be called to disperse them. Upon this the people withdrew. But throughout the next day, though no disturbance took place, the excitement continued with little abatement. With a view to removing the cause of tension. the local authorities suspended the salt duty ; but the governor in Council thought otherwise and ordered it to be brought into effect by a proclamation in the near future. because he had abolished the town duties for that purpose and desired to compensate the loss of revenue caused thereby. It was represented that one could not be a substitute for the other. as the abolition of town duties would benefit only a few persons while the imposition of salt duty would affect the whole of the poor rayats ; but the authorities remained adamant. As it was, the leaders of the community as well as the Patels of the Pooras[2] were partly satisfied by the abolition of town duties and partly intimidated by the timely arrival of the military force from Bombay,[3] so that no further disturbances took place, and in the following month (September 14th), when the Salt Act was introduced. 'perfect tranquility prevailed throughout the city.'[4]

Weight and measures, riot 1848.

In the beginning of April, 1848, an attempt was made to introduce Bengal standard weights and measures in Surat. The proposed change met with much opposition. The shops were closed for several days and a placard was affixed to a house in

1. Source material for A History of Freedom Movement in India, Bombay, Vol. I page 6.

2. Poora : a Gujarati word meaning 'part of a town'.

3. Source Material for-a-History of Freedom Movement in India, Bombay, Volume I page 12.

4. Sessions Judge, to Government, dated 14th September, 1844.

the city, stating that the people of each caste had agreed to expel any one of their number who adopted the new weights and that a sum of Rs. 50,000 had been subscribed to contend 'the point at law as far as England.' It was reported that the Mahajans resolved not to sell corn to government servants. They also arranged to submit a petition of 5,000 signatures praying for the cancellation of the order about the new weights. However, no breach of peace was committed. On the 5th April, a deputation of merchants waited on the collector who agreed to postpone the introduction of the measure until the people represented their case to government. On hearing how unpopular the change was, Government (7th April, 1848) decided that the attempt to introduce the new weights and measures should be abandoned. The strong feeling in Surat was supposed to have been created by certain ill disposed persons circulating the rumour that this was a preliminary step to an increase of taxation. But on inquiry nothing more than a general dislike to change was proved.[1]

Income-tax riot, 1860.

In 1860 (November 29th), in connection with the introduction of the income-tax, a slight disturbance took place in Surat. About nine in the morning of that day the residents of the Burhanpur Bhagal, one of the central quarters of the city, collected to the number of about three thousand, declaring that they would not fill in the income-tax forms and that they would close their shops until the income-tax was repealed. The crowd was ordered to be dispersed but it disobeyed and continued to be there. It was therefore charged with mounted police and compelled to be dispersed. Some thirty persons were arrested, of whom 24 were convicted and sentenced to six months imprisonment with hard labour.[2]

State of the district 1857.

During 1857, in spite of the riots at Broach and the disorders in other parts of Gujarat, the tranquility of Surat was unbroken. This, in the opinion of the district magistrate, was in great measure due to the unshaken loyalty which Sheikh Saheb Syed Hussein Idrus, the head of one of the chief Musalman families of Surat, maintained towards the British government, and the beneficial exercise of his influence amongst his people, the Muhammadans of Surat.[3]

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1. Collector, to Revenue Commissioner, 148, dated 2nd April 1848.

2. Source Material for a History of the Freedom Movement in India, Bombay, Vol. I, p. 19.

3. District Magistrate to Government, No. 741, dated 11th December 1857. In reward for these services Syed Idrus received the grant of a yearly allowance of Rs. 500. (Government of Bombay Resolution, dated 19th April 1860). Since then, this gentleman was further honoured by being made a Companion of the Star of India. Both in 1759 and in 1800 the Idrus family aided the establishment of British power in Surat. (Surat Papers, 489). In 1800 (7th July), in recognition of his position and influence, Mr. Duncan granted a yearly allowance of Rs. 500 to 'Syed Sheikh, the son of the pricnipal Syed of the Idrus mosque.' (Accompaniment to Government letter No. 2488 of 1860, to the Collector of Surat. According to papers in the possession of the family, the family appears to have came to Gujarat from Arabia as early as 1550. (H. 958). One of them settled in Surat, and from their high descent, and the power which some of them reportedly possessed of working miracles, they held a position of much respect in Surat.

Condition of the district, 1800-1889.

After its transfer to the English, the condition of Surat would seem for a time to have improved. As the territories in the neighbourhood of the city came under British management, abuses were checked, order was established, and the area of land under cultivation enlarged. But, about the year 1830, the fall in the value of agricultural produce, the decrease of trade, and the failure of local manufactures, depressed the condition of the rural population and made extensive reduction of revenue necessary. The city of Surat suffered still more severely. Trade deserted it and the city was on more than one occasion almost destroyed by fire and flood. About 1850 affairs took a turn for the better. Trade revived and the prices of agricultural produce rose. A decade later, the construction of a railway line did much to improve communications and trade and a few years later the great rise of prices due to the American war brought large sums of money to the district by the sale of cotton. Much of this wealth was afterwards (1866) lost in unsuccessful speculation in Bombay. But enough remained to raise for some years the value of land and house property. During the six years from 1870 to 1876 prices again fell, the profits of the cultivators were much reduced and a considerable area of land, once under cultivation, was abandoned. Still, except the aboriginal tribes, the great body of the rural population of the district appeared well-to-do. While in the city of Surat, though it was no longer the centre of trade for any large area of country, the hand-loom weaving of silks and brocades recovered some of its former importance, and two steam cotton spinning and weaving factories were started. Statistics of the development of the district for successive years are not available. But, as compared with 1851, the census returns of 1872 showed that while the population had advanced by 23.22 per cent, agricultural stock increased by 16.08 ; the area[1] of land under cultivation by 42.67 ; and the value of the trade of the district by 45.06 as compared with the trade in 1801-1802. During the same time 73 miles of rail and 315 miles of road were constructed in the district while in the city, besides erecting some public buildings and opening a public park, 18 miles of streets were made and lighted, a system of public markets and conservancy was established, and efficient measures were taken to protect the city against fire and flood.

In 1878 a riot broke out in Surat to oppose the introduction of the License Tax, when the traders of the city combined to close their shops from 1st to 5th April. For the first two days the situation was not very serious. On Wednesday (the 3rd of April) evening, a crowd of persons assembled at the castle to whom the District Magistrate Mr. Olivant explained the provisions of the new tax and after some talk with the people they

1. Returns of the area under cultivation, through any great number of years, are not available. But, as compared with the area cropped in 1859-60, the returns for 1873-74 show that no less than 181, 141 acres of waste land had been taken under cultivation.

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History
BRITISH PERIOD

went away very quietly. The shops, however, remained closed. On the 4th evening another crowd of petitioners came to the castle. Mr. Olivant moved about amongst them and talked to them individually. On his leaving the castle, the crowd grew rather noisy and insisted on following him. They began to be turbulent. With the help of the police the crowd was stopped from coming across the bridge to the European quarters and doing further mischief. On Friday the 5th the mob had the audacity to go to the railway station and demand the stoppage of trains in order to make the strike more effective. On their refusal to disperse three of the rioters were shot dead and two wounded. The District Magistrate shortly arrived on the scene, dispersed the crowd and made several arrests. Next day he resorted to strong measures and succeeded in getting the people to open their shops in every bazar. The arrested were put on trial and were sentenced, some to transportation and others to long term imprisonment. The District Magistrate then proceeded to push on the work required in connection with the License Tax Act. A punitive post was also kept up for some five years at the cost of the inhabitants.[1] It must be observed that Surat was not alone in protesting against the License Tax. Similar meetings of traders and citizens were held in Bombay, Poona and Ahmedabad to protest against the levy of the tax.[2]

Apart from these incidents of popular agitation, two calamities that visited Surat may be noted. On the 3rd of July 1883 Surat suffered from a very severe flood, and in 1889 from a great fire.[3]

Later History.

During the 19th century the city and district of Surat recorded considerable progresss in educational and cultural activities as also in economic life. As early as 1820 an attempt was made by William Carey to translate the Bible in Gujarati. Missionary activity further extended to the starting of schools, of a printing press and to the preparation of a grammer and dictionary of the Gujarati language. Public spirited citizens also took the initiative in establishing schools in which English began to be taught. The Manav Dharma Sabha (society for the propagation of humanitarian religion) was founded in 1844. With the transfer of the headquarters of the East India Company from Surat to Bombay the importance of the former naturally dwindled. Many of its industries, particularly the ship-building industry, very considerably declined. But the gold and silver thread

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1. Edalji Dosabhai : History of Gujarat pages 298-299. See also Source Material for a History of the Freedom Movement in India, Bombay (1957) pp 29-32.

2. For details see 'Source Material for a History of the Freedom Movement in India', Bombay (1957), Vol. I, pp.33, 35, 40.

3. Edalji Dosabhai : History of Gujarat p. 298.

industry, though it was for some years adversely affected by competition from the products of France where the industry had come to be mechanized, survived all difficulties and a firm footing was given to it by the imposition, after World War I (1914-18), of a duty of 30% on imports of gold and silver thread from abroad. The Indian artisan engaged in this industry has now adopted mechanical methods in the process of production. Surat district is particularly famous for its high quality cotton and a number of ginning factories, some of them working on co-operative lines, have been flourishing in the area. There are cotton textile mills in Surat, Navsari, and Bilimora and hundreds of power-looms, mostly in the city of Surat, are also engaged in the manufacture of cloth which has a wide market in several parts of the country. Surat is, besides, well-known for its gold cloth (*kinkhab*), silver brocade, sandal wood and ivory work, calico printing etc.

In 1877 was constructed a bridge across the Tapi at a cost of Rs. 8,13,000. It is known as Hope bridge and it has facilitated communication with Broach and the neighbouring area in the north. The municipality of Surat was established as long ago as 1853 and since then civic amenities like hospitals, public gardens etc. have gradually been growing. Thanks to the efforts of public spirited citizens who started educational societies to conduct high schools and colleges, considerable progress has been made by the district in respect of education at all levels. There are high schools in practically every town big or small and colleges at Surat, Navsari and Bulsar. The first newspaper in Surat, Surat-Mitra, was published on 13-9-1853 ; its name was later on changed to Gujarat-Mitra. Deshmitra, a weekly, was started in 1873, Gujarat Darpan bi-weekly in 1888 and Swatantrya, a monthly in 1877. In 1882 was founded the Prajahit Vardhak Sabha (society for promoting the interests of the people) ; it interested itself in problems of local self government and made representations to the authorities for the redress of grievances. A number of humanitarian, literary, cultural and commercial institutions have sprung up in the city of Surat and in other towns of the district and they help in the general advancement of the people.

The holding of the historic 23rd session of the Indian National Congress in Surat in 1907 was an event of great importance not only in the life of the city but in the life of the whole country because the session witnessed the tragic split between nationalists and moderates which had far reaching repercussions on Indian politics. Another very significant event in the history of the whole country was the Bardoli Satyagraha of 1928 against the enhancement by the then British authorities of the rates of land revenue in that taluka. With Surat district is also associated the momentous Dandi march undertaken by

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Mahatma Gandhi as part of the nationwide mass civil disobedience movement launched by him in 1930 for securing Swaraj from British rulers. Dandi is a small village on the sea-shore about 25 miles south-west of Surat and it was in this village that the salt law was broken by Mahatma Gandhi and a large number of other people. On 15th August 1947 the country became completely free and free India thereafter framed for itself a constitution. It came into operation on 26th January 1950 and from that day India became a sovereign democratic republic.

CHAPTER 3—THE PEOPLE AND THEIR CULTURE

THE PEOPLE
Details of 1951 census.

ACCORDING TO THE CENSUS RETURN OF 1951 the total population of the district, including the newly merged areas [1], was 18,27,842 (*m.* 9,18,277 ; *f* 9,09,565) souls. Spread over its area of 46,066 sq. miles, it works out at 449.4 to the square mile. Of these 14,39,191 (*m.* 7,17,943 ; *f.* 7,21,248) or 78.8 per cent is spread over the rural areas, and the remaining 3,88,651 (*m* 2,00,334 ; *f.* 1,88,317) or 21.2 per cent. over the urban areas.

Livelihood pattern.

This population is split up by the census into eight livelihood classes. Of these. the four Agricultural classes make up a total of 61.2 per cent and include : cultivators of owned land 34.7 per cent ; cultivators of unowned land 11.1 per cent ; cultivating labourers 14.6 per cent ; and non-cultivating owners of land 0.82 per cent. The four Non-Agricultural Classes total 38.8 per cent and include production other than cultivation 14.8 per cent ; commerce 6.7 per cent ; transport 2.4 per cent ; and other services and miscellaneous sources 14.9 per cent.

Communities.

The community-wise enumeration of the population given by the census reveals that in the district Hindus (including Scheduled Castes and Scheduled Tribes) number 1,665,366 (*m.* 836,555 ; *f.* 828,811) or 91.1 per cent ; Sikhs 746 (*m.* 459 ; *f.* 287) ; Jains 18,387 (*m.* 9501 ; *f.* 8,886) or 1.0 per cent ; Buddhists 47 (*m.* 45 ; *f.* 2) ; Zoroastrians 14,590 (*m.* 6702 ; *f.* 7,888) or 0.8 per cent ; Muslims 1,22,734 (*m.* 61,686 ; *f.* 61,048) or 6 7 per cent ; Christians 5,171 (*m.* 2,842 ; *f.* 2,329) or 0.28 per cent ; Jews 51 (*m.* 25 ; *f.* 26) ; and Non-tribals 750 (*m.* 462 ; *f.* 288). While the categories mentioned above make up the whole total population, the Census has also enumerated 118,286 (*m.* 55,604 ; *f.* 62,682) or 6.47 per cent belonging to the Scheduled Castes. 854,405 (*m.* 427,158 ; *f.* 427,247) or 46.7 per cent as belonging to Scheduled Tribes, and 6607 (*m.* 3,498 ; *f.* 3,109) as Displaced Persons from West Pakistan.

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1. Surat district consisted at the time of the 1951 census of the area of the former Surat district of Bombay Province (except for two villages transferred to Nasik district and three villages transferred to Dangs district), with the addition of the former Indian States of Bansda, Sachin and Dharampur, Navsari district of the former Baroda State, twenty-four villages of Broach district and four villages of Dangs district.

The major part of the population of this district as is obvious from the population statistics, consists of Hindus; next come Muslims and then Parsis. Among the Hindus apart from the various caste divisions are found various religious sects such as Shaiva, Vaishnavas, Jains, etc. In the following pages are described some of the customs and cultural traits of the three major community groups–Hindus, Parsis* and Muslims. The Backward classes including the Scheduled Castes and Scheduled Tribes, are dealt with in a separate section.

Of the ten tables given below:

The first indicates the variation in area, houses and population over the long period from 1881 to 1951.

The second table shows the birth and death rates from 1951 to 1955.

The third gives the distribution of population in 1951 according to the means of livelihood.

The fourth exhibits the distribution of rural and urban population of the district by religion in 1951, while the fifth shows the population by religion from 1881 to 1951.

The sixth enumerates the distribution of population among talukas according to the decennial censuses from 1901 onwards.

The seventh and the eighth show area, houses and inmates in urban and rural areas in 1951.

The ninth gives the distribution of population according to languages for the years 1911, 1931 and 1951.

The tenth table indicates the civil conditions by age periods of all communities for the years 1911, 1941 and 1951.

TABLE No. 1

AREA, HOUSES AND POPULATION FROM 1881 TO 1951, SURAT DISTRICT

Census Years.	Area in Square Miles.	Towns.	Villages.	Occupied Houses. Urban.	Occupied Houses. Rural	Population. Urban Males	Population. Urban Females.	Population. Rural Males.	Population. Rural Females
1	2	3	4	5	6	7	8	9	10
1881	1,220	1	378	1,033	26,861	2,638	2,538	74,995	70,961
1891	1,662	9	788	33,377	93,419	78,282	77,582	2,43,143	2,50,782
1901	1,653	8	770	32,371	98,074	84,092	81,061	2,33,695	2,38,169
1911	1,651	5	755	13,178	1,08,013	76,975	72,019	2,49,933	2,55,182
1921	1,651	5	777	35,929	1,11,949	83,186	75,791	2,54,201	2,61,173
1931	1,651	5	780	35,624	1,15,948	75,296	67,307	2,72,987	2,78,023
1941	1,695	5	785	46,555	1,41,012	1,15,107	1,04,993	3,27,214	3,33,744
1951	4,066.6	15	1,938	53,852	2,57,122	2,00,334	1,88,317	7,17,941	7,21,248

*The Parsis because of their local importance have been described at length.

TABLE No. 2

BIRTH AND DEATH RATIO FROM 1951 TO 1955

Surat

	BIRTH RATIO PER 100 OF ESTIMATED POPULATION.			DEATH (ALL CAUSES) PER 1000 OF ESTIMATED POPULATION.		
Year.	*Male.*	*Female*	*Total.*	*Male.*	*Female*	*Total.*
1951	18 97	17.35	36 32	16.09	15.03	15.56
1952	18.75	17.96	36.71	17.29	15.69	16.49
1953	16.7	15.7	32.4	15.7	14 8	15.2
1954	17.6	16.6	34 2	13.4	12.2	12.8
1955	20.3	19.2	39 5	13.2	12.4	12.8

TABLE No. 3

LIVELIHOOD CLASSES AND SUB-CLASSES —1951.

Occupation		(i) Primary means of livelihood: Rural areas.	Urban areas	Total	(ii) Secondary means of livelihood: Rural areas	Urban areas.	Total[1]
Agricultural Classes [1]							
I Owner Cultivator and dependents	M	3,11,721	4 401	3,16,124	21,977	902	22,879
	F	3,12,953	4,354	3,17,307	38,977	143	39,120
II Tenant Cultivators and dependents	M.	1 01,256	1,319	1,02,575	11,693	212	11,905
	F.	98,381	1,271	99,652	12,193	67	12,260
III Agricultural labourers and dependents	M	1,28,398	2,168	1,30,566	40,541	591	41,132
	F.	1,34,390	2,246	1,36,636	95,279	1,252	96,531
IV Landlords and dependents	M	4 755	1,832	6,587	1,858	1,127	2,985
	F	6 351	2 102	8,453	448	75	523
Non-Agricultural Classes							
V. Production (other than cultivation)	M	63,606	76,803	1,40,409	16,645	7,4[illegible]9	20,074
	F	60,474	69,717	1,30,191	7,065	5,665	12,732
VI Commerce	M	17,583	45,830	63,413	3,978	6,623	7,738
	F	16,268	42,775	59,043	1,819	5,546	2,837
VII. Transport	M	14,132	7,223	21,555	4,666	2,998	5,087
	F	16 869	6,141	23,010	158	983	204
VIII. Other services and miscellaneous sources	M.	76,292	60,756	1,37,048	19,755	5,636	25,391
	F	75 562	59,711	1,35,273	18788	6,783	25,571

TABLE No. 4

POPULATION BY RELIGION—RURAL AND URBAN -1951

Religion	RURAL: Male	RURAL: Female	URBAN: Male	URBAN: Female	TOTAL: Male	TOTAL: Femlae
Hindus	6 81,701	6,84,946	1,54,854	1,43,865	8,36,555	8,28,811
Scheduled Castes	46,278	54,196	9,326	8,486	55,604	62,682
Scheduled Tribes	4,05,542	4,06,080	21,616	21,167	4,27,158	4,27,247
Sikhs	341	240	118	47	459	287
Jains	3,586	3,122	5,915	5 764	9,501	8,886
Buddhists	41	-	4	2	45	2
Zoroastrians	2,507	2,384	4,195	5,504	6,702	7,888
Muslims	27,575	28,952	34,111	32,096	61,686	61,048
Christians	1,847	1,374	995	955	2,842	2,329
Jews	17	11	8	15	25	26
Other Religions (non-tribal)	328	219	134	69	462	288

1. All the cultivators of the district do not belong to one of these four classes. The names of the different classes of cultivators will be found below in the chapter on Agriculture.

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THE PEOPLE

TABLE No. 5

POPULATION BY RELIGION FROM 1881 TO 1951.

Religion	1881		1891		1901		1911		1921		1931		1941		1951	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
Hindus	2,07,841	2,07,190	2,84,054	2,88,862	2,75,586	2,75,441	2,86,338	2,85,448	2,79,833	2,80,147	3,08,040	3,04,895	2,29,771	2,30,036	8,36,555	6,28,811
Sikhs	3	3	...	.	2	1	...	..	4	...	14	3	35	10	459	287
Jains	6,402	5,268	6172	5,260	6,501	5,284	5,248	4,573	5,427	4,817	4,553	4,075	6,046	5,549	9,501	8,886
Buddhists	4	.	1	...	...	..	...	..	3	5	4	2	7	5	45	2
Zoroastrians	5,779	6,814	5,853	6,904	5,770	6,746	5,364	6,419	5,037	6,014	4,893	5,654	4,424	5,076	6,702	7,888
Muslims	27,049	28,498	25,251	27,056	26,155	28,036	27,170	28,224	28,071	28,179	29,541	29,516	39,117	37,134	61,686	61,048
Christians	379	242	271	269	611	481	674	511	1,059	799	1,213	1,154	1,667	1,506	2,842	2,329
Jews	28	33	23	13	4	5	7	7	28	31	23	30	24	23	25	26
Other Religions— Non-tribal			...	..	...	..	14	13	...	.	6	3	29	24	462	283
Tribes (Aboriginals)	58,527	60,137	..	. .							2	1	1,61,201	1,59,374	...	...
Animistic	..	...	..	.	3,158	3,236	2,045	2,006	17,925	16,972	..	..	..	...	...	...

TABLE No 6

POPULATION BY TALUKA FROM 1901 TO 1951.

	1901		1911		1921		1931		1941		1951	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
1. Bansda	—	—	—	—	—	—	—	—	—	—	32,944	31,021
2. Bardoli	28,977	27,930	29,995	29,084	30,577	30,715	24,517	24,129	35,537	35,058	39,245	39,038
3. Bulsar	41,259	42,217	44,075	45,329	48,175	47,899	51,594	52,520	60,645	62,116	69,053	68,905
4. Chikhali	29,757	29,935	31,153	31,621	31,355	32,466	36,684	37,494	41,334	42,785	60,983	62,889
5. Chorasi	86,007	83,093	87,630	82,552	90,740	84,374	84,027	77,234	1,33,948	1,23,849	1,78,840	1,70,192
6. Dharampur	—	—	—	—	—	—	—	—	—	—	54,828	54,281
7. Gandevi	—	—	—	—	—	—	—	—	—	—	54,369	55,002
8. Jalalpur	39,050	42,132	35,754	39,498	37,282	42,128	40,574	44,185	49,210	54,368	—	—
9. Kamrej	—	—	—	—	—	—	—	—	—	—	25,591	26,327
10. Mahuwa	—	—	—	—	—	—	—	—	—	—	27,087	27,064
11. Mandvi	21,167	21,283	26,842	26,185	26,009	25,351	29,081	28,581	32,944	31,788	38,477	36,728
12. Mangrol	—	—	—	—	—	—	—	—	—	—	38,161	38,041
13. Navsari	—	—	—	—	—	—	—	—	—	—	94,895	1,04,270
14. Olpad	29,079	29,669	26,522	23,984	27,060	27,380	30,418	30,413	28,157	28,460	31,813	32,755
15. Palsana	—	—	—	—	—	—	—	—	—	—	17,570	17,864
16. Pardi	30,483	31,208	31,136	32,470	32,786	33,437	38,942	38,286	44,412	44,818	54,772	55,864
17. Songadh	—	—	—	—	—	—	—	—	—	—	32,174	29,731
18. Valod	11,988	11,763	13,792	13,478	13,403	13,214	12,446	12,488	16,134	15,495	18,338	17,841
19. Vyara	—	—	—	—	—	—	—	—	—	—	46,197	43,752

TABLE No. 7

URBAN AREA, HOUSES AND INMATES—1951

Serial No.	Name of village or town ward	Area of village or town in square miles	Number of houses	Number of house-holds	Total number of persons enumerated (including inmates of institutions and houseless persons).			Number of inmates of institutions and houseless persons	
					Persons	Males	Females	Males	Females
1	2	3	4	5	6	7	8	9	10
1	Bulsar ...	4.0	4,536	4,984	25,440	13,005	12,435	149	141
2	Chorasi Rander ...	3.3	2,611	2,874	14,212	6,826	7,386	167	14
3	Dharampur ...	2.3	964	984	5,096	2,529	2,567	—	1
4	Bilimora ..	2.2	2,274	3,228	16,669	8,846	7,823	33	14
5	Gandevi ...	2.9	1,554	1,599	8,384	4,137	4,247	7	3
6	Kathor ...	4.3	894	1,088	5,103	2,501	2,602	88	9
7	Mandvi ..	2.9	1,494	1,502	7,479	3,789	3,690	94	44
8	Navsari ...	1.4	6,003	8,701	44,663	22,738	21,935	241	86
9	Songadh ...	1.0	866	964	2,858	1,480	1,378	36	—
10	Vyara ..	2.5	1,926	2,102	11,327	5,830	5,497	49	13

TABLE No. 8

RURAL AREA, HOUSES AND INMATES—1951.

Serial No.	Name of village or town ward	Area of village or town in square miles	Number of houses	Number of house-holds	Total number of persons enumerated (including inmates of institutions and houseless persons).			Number of inmates of institutions and houseless persons	
					Persons	Males	Females	Males	Females
1	2	3	4	5	6	7	8	9	10
1	Bansda ..	231.8	11,475	11,817	59,510	30,672	28,838	26	22
2	Bardoli ...	152.1	10,797	12,426	61,235	30,611	30,624	1,120	785
3	Bulsar ...	197.8	20,418	21,924	1,12,518	56,048	56,470	172	96
4	Chikhai ...	237.6	21,573	23,177	1,23,872	60,983	62,889	234	117
5	Chorasi	206.1	21,087	23,488	1,08,903	54,267	54,636	1,277	609
6	Dharampur .	572.3	19,360	19,788	1,07,013	55,299	51,714	181	22
7	Gandevi ..	119.7	16,213	17,306	84,318	41,386	42,932	70	66
8	Kamrej ..	142.7	8,536	9,417	46,815	23,090	23,725	1,079	808
9	Mahuwa ..	137.9	8,955	9,925	54,151	27,087	27,064	91	47
10	Mandvi ..	273.6	11,545	12,209	67,726	34,688	33,038	776	365
11	Mangrol ..	293.5	12,300	13,613	74,202	38,161	36,041	913	483
12	Navsari .	281.7	30,282	33,414	1,54,502	72,157	82,345	1,735	938
13	Olpad	264.8	12,176	13,058	64,568	31,813	32,755	2,296	1,829
14	Palsana ..	57.6	6,261	6,824	35,374	17,510	17,864	960	686
15	Pardi .	162.2	18,218	20,775	1,10,636	54,772	55,864	46	23
16	Songadh ..	297.7	8,778	9,862	59,047	30,694	28,353	105	4
17	Valod .	77.9	6,373	6,869	36,179	18,338	17,841	143	92
18	Vyara ...	314.1	12,775	13,542	78,622	40,367	38,255	242	157

CHAPTER 3.

The People and their culture.

THE PEOPLE

TABLE No. 9

LANGUAGE (MOTHER-TONGUE)

Language	1911		1931		1951	
	Males	Females	Males	Females	Males	Females
Bhil Dialects	10,804	10,622	1,285	1,255	8,988	8,342
Gipsy	21	9	—		—	—
Gujarati	2,99,708	3,03,004	3,24,262	3,25,692	8,44,092	8,46,114
Hindustani	10,748	8,706	-	—	181	43
Kanarese	14	1	156	174	193	95
Marathi	3,590	3,300	3,327	2,544	24,508	20,392
Sindhi	281	201	46	17	3,039	2,790
Western Hindi	1,168	1,069	17,107	14,860		—
Panjabi	10	2	46	12	319	171
Rajasthani	257	82	343	120	907	347
Baluchi	5	1	3	-	1	-
Brahmi	—	—			—	
Pashtu	31	—	71	12	37	4
Other Indian Languages	118	121	4			
Persian	5	2	17	52	—	
Other Asiatic Languages	37	4		12	2	5
English	80	76	168	148	150	149
Portuguese	25	—	—		56	55
Other European *Languages*	—	2	75	11		
African Languages	6	9			—	—
Konkani*	—		123	101	258	176
Kachchhi*	-	-	246	162	204	201
Khandeshi*			2			
Tamil*	—	-	13	4	218	107
Telugu*			53	39	1,307	761
Malayalum*		—	6		59	17
Bengali*		—	19	5	108	43
Urdu†	—	-			28,151	27,539
Hindi†	-				5,367	2,178
Naipali†	-	—			61	12
Arabic†	—				18	3
Chinese†		—			5	2
Oriya†					23	1
French†	—	-			17	6
Spanish†	—	—			—	1

TABLE No. 10

CIVIL CONDITIONS BY AGE PERIODS (ALL COMMUNITIES).

1911.

Age Periods.	Total Population		Married		Unmarried		Widowed	
	Male	Female	Male	Female	Male	Female	Male	Female
1	2	3	4	5	6	7	8	9
0-5	47,041	48,612	799	1,219	46,072	47,142	170	51
5-10	43,519	42,075	3,078	6,051	40,296	35,909	145	115
10-15	38,085	32,628	9,275	15,496	28,477	16,672	333	460
15-20	27,561	26,476	12,580	21,096	14,407	4,551	574	799
20-40	1,02,097	1,08,405	82,583	95,860	13,130	2,280	6,384	10,265
40-60	54,011	52,646	42,168	30,041	2,037	346	9,806	22,259
60 and over	14,594	16,359	8,128	3,251	446	52	6,020	13,056
Total	3,26,908	3,27,201	1,58,611	1,73,014	1,44,965	1,07,182	23,412	47,005

* These languages were not shown separately in 1911 Census and were included in other Indian, Other Asian or Other European Languages.

† These languages were not shown separately in 1911 Census and 1931 Census, and were included in other Indian, Other Asian or Other European Languages.

TABLE No. 10 (contd.)

1941

Age Periods. 1	Total Population		Married		Unmarried		Widowed	
	Male 2	Female 3	Male 4	Female 5	Male 6	Female 7	Male 8	Female 9
0-10 ..	2,376	2,344	8	12	2,364	2,331	4	1
11-15 ..	1,072	875	30	84	1,039	788	3	3
16-20 .	800	781	217	504	574	255	9	22
21-25 ..	741	844	447	762	273	57	21	25
26-30 ..	707	802	570	749	105	19	32	34
31-35 ..	679	693	600	630	45	9	34	54
36-40 ..	588	583	527	500	23	5	38	78
41-45 .	487	506	416	387	21	5	50	114
46-50 .	430	430	352	285	17	2	61	143
51-55 .	330	306	261	171	10	1	59	134
56-60 ...	252	239	188	100	6	1	58	138
61-65 ..	172	154	126	52	5	—	41	102
66-70 ..	96	93	66	28	1	1	29	64
71 and above ...	121	132	58	28	3	—	60	104
Total	8,851	8,782	3,866	4,292	4,486	3,474	499	1,016

1951.

Age Period 1	Total Population		Married		Unmarried		Widowed or Divorced	
	Male 2	Female 3	Male 4	Female 5	Male 6	Female 7	Male 8	Female 9
- 0 .	2,970	2,732	—	—	—	—	—	—
1- 4 .	10,079	10,185	—	—	—	—	—	—
5-14	23,821	22,911	98	279	23,721	22,624	2	8
15-24 .	15,520	16,527	5,141	11,376	10,230	4,769	149	382
25-34 .	13,582	14,185	11,738	13,180	1,339	270	505	735
35-44	11,004	10,297	9,927	8,757	398	678	679	1,462
45-54	7,689	7,096	6,457	4,616	211	45	1,021	2,435
55-64	4,305	4,319	3,169	1,694	154	25	982	2,609
65-74	1,660	1,818	1,026	357	29	12	605	1,449
75-and over	546	752	259	92	20	3	267	657
Age not stated ..	9	6	2	3	5	3	2	—
Total	91,185	90,828	36,817	40,354	36,107	27,830	4,213	9,737

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Thanks to the impetus given to urbanization consequent on the growth of industries and to the further acceleration of that process in the post-Independence period as a result of the increased industrial tempo in almost all parts of the country under a planned economy, the pattern of house construction and the nature of facilities available to its occupants have generally undergone a considerable change. The realisation of the potentialities of cement and steel as basic material in erecting structures has been another potent contributory factor in introducing altered designs for buildings. Consequent on the ever-growing pressure of population in urban areas, the size of individual towns and cities has been constantly expanding. The height of buildings is being continuously added to ; houses are being planned and constructed with a view to providing a large number of small tenements in which a much larger number of people than what previously could be thought of for such accommodation could take up their residence. The phenomenon of big chawls having several floors and having on each floor continuous rows of single or double rooms has become a fairly common feature of many big industrial towns. Open

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spaces, small or large, in front or in the rear of houses are being progressively squeezed out as a result of overcrowding and of the insistent demand for more and more accommodation.

On the other hand, attempts are also made to introduce some kind of system in urban expansion in order to make it more healthy, salutary and purposeful. In most of the important cities there is now established a separate town planning authority which prescribes several rules and regulations to govern construction. New buildings are required to conform to plans approved of by that body. Incorporation of extensive vacant areas surrounding an old city within the limits of that city has given rise to the growth of suburbs or new township which, on account of prior plannig, are generally devoid of those irregularities, uncouthness and insanitary conditions which have usually marred the older haphazard concentrations of population. The gradual introduction of underground drainage system with flushing tanks in individual houses and the more widely extended facility of water supply through water taps to individual tenements or households have made unnecessary in such houses the special arrangements that had to be made in the old type of houses for providing those services.

The use of cement and steel and of reinforced concrete, because of the immense strength and durability of their combination, has resulted in a substantial reduction in the width of walls of houses and in the use of timber for purposes of pillars and ceilings. In the case of new houses in modern cities, there is a certain kind of uniformity of appearance and architectural design and also in the nature of accommodation provided. Self contained two room, three room or four room tenements with probably one or two balconies and with independent sanitary attachements, is generally the residential quarter of a middle-class family in a predominantly industrial town. Bigger accommodation either by way of bigger flats or of bungalows is the privilege of the richer section of the community. The majority have, however, to live in small one room or double room tenements in an over-crowded manner.

In the nature of things, the pattern of houses in villages in the district has not undergone in any appreciable measure the same kind of change that it has undergone in cities. Broadly speaking, the old pattern and style continue. However, villages in close proximity of urban areas have to some extent been influenced by what has been happening only a few miles away from them. A small number of modern type storeyed houses in an otherwise rural surrounding are not an infrequent sight in the village landscape.

The description of houses given in the following pages has thus not to be taken to apply to the generality of houses as they are built today, particularly in cities. It rather applies to

houses constructed a generation or two ago and which still constitute a substantial proportion of contemporary urban accommodation. Nor would it be correct to imagine that the old mode and style have been entirely given up even in new constructions undertaken in the present times.

The type of houses built in the district vary with the locality and the stage of development and culture of the community to which the inhabitants belong. For purposes of description such dwellings can best be treated according to their location:(1) towns, (2) villages in plain areas, and (3) villages in forest areas.

Towns.

(1) The ready availability of timber from the nearby Dāng forests affects the construction of the houses of the well-to-do in the district. In a number of them the weight of the building rests not on the brick walls, but on large wooden pillars, placed at the corners and at intervals along the inner walls. Each storey of such a dwelling is built so as to be independent and self supporting.

Town houses of the better class are generally built on a slightly raised plinth which is reached by two or three stone steps set parallel to the line of the street. Along the outer edge of the plinth, is a row of wooden pillars set on stone pedestals with their capitals let into a heavy cross-beam that supports the upper storey. Behind the row of wooden pillars and under the projecting part of the upper storey is an *oṭalā* (open terrace) from two to four feet wide. At the back of the *oṭalā* runs the front wall of the lower part of the house with an entrance in the middle furnished generally with a strong wooden-barred door.

The house consists of a front and a back part separated by a small open court on each side of which is a passage, and in the upper storey (if there is one) an open terrace connecting the front and back parts of the house.

Entering from the street the first room is called *parsāl* (entrance room) which is generally without much furniture except the *hīñchko* (swing cot). In some cases it is used as a store or lumber room, or occasionally as a *kaceri* (public room), or as a workshop if the owner of the house is an artisan. The *parsāl* leads to *chauk* (small court). The floor of the *chauk* is paved with stone or lined with cement and is used as a bathing place. The passage on either side of the *chauk* opens into a number of rooms, on one side being the *rasoḍū* (cooking room) and the *pāniyārū* (water-room), and on the other side, the chamber for the household gods and another one containing a well or a *tānka* (cistern)[1] in which rain water is collected and used for drinking purposes. Behind the court

1. With the availability of pipe-water, these *tankas* are dispensed with.

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and opposite the entrance room there are generally one or two *orḍā* (chambers), which are usually dark and used as store for grain and firewood and even as bedroom for women of the house. The family ornaments are sometimes kept in this room in a strong box.

In houses built on the *chauk* (court) plan the distribution of rooms is not always the same. But they are alike so far that the building must set apart on the ground floor places for cooking, dining, worshipping, bathing, grainstoring, and business-transacting. Many of the old houses are provided with a water-closet which is generally at one end of the verandah.

To get to the upper floor (*meḍī*) there is generally in one corner of the entrance room a wooden stair-case. The front room in the upper storey above the *parsāl* is used as a *divā-nkhānu* (reception room). It may be furnished in the old fashioned way with a carpet and a row of cushions propped against the walls, perhaps a mirror or two and with lamps hung from the ceiling. Generally a *hiṇḍoḷo* (swing-cot) will be found in the room for the head of the family to rest or sleep at night. Those who have adopted new ways, furnish the room with tables, chairs or a sofa-set in western fashion. The back portion of the upper storey is called the *pāchli meḍī* which contains rooms used as bedrooms by the sons of the family. The family clothing and sometimes the jewels are stored in these rooms in (*peṭārās* strong boxes) and safes respectively.

The houses built say from 1860 and onwards in 'Bombay Style' differ from the old ones built in Muhammadan and Hindu styles. They are bigger, more open, the wooden pillars in front instead of being square, are rounded, taller and slighter than the older ones. The plinth is raised several feet above the level of the ground. The wood-work is almost entirely plain, with no heavy eaves, carved cornices, or richly-cut capitals. Indoors the rooms are larger and higher, and more airy, though perhaps not so cool as the old houses. The staircase is in some cases some advance on the old rope and ladder arrangement for getting into the upper storey. It has slightly broader wooden steps, and a wooden hand-rail. The ascent is less steep, with sometimes a turning or resting place half way up. The rooms on the upper storey are more open and airy, with a boarded ceiling, and some houses have a paved terrace on the roof reached by a ladder.

Modern houses are generally built in *chuna* or cement masonry and in *chuna* or cement plaster. The structure is of wood-work. The doors, windows and ceiling are of wood. Rich people who have constructed their houses during the last thirty years have used R. C. C., slabs for floorings; otherwise all floorings are of wooden cuttings and planks covered either by cow-dung and mud or by cement-plaster or stone slabs. They are also covered by cement tiles occasionally. The poor class

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people in towns build their houses in mud masonry either with cement or *chuna* plaster or pointing. They are either single storied or double-storied with roofs of country tiles

None of the towns[1] in the district has a proper drainage system and hence each house has its own covered pit either in the house premise or in front of the house for water disposal. These are more or less of the sort of soak-pits Where pipe-water supply is not provided well water is used for drinking, bathing or washing purposes. Even where there is pipe water supply some use well water for drinking.

This description holds good in the case of dwellings of artisans and poorer classes in towns except that they are generally without an upper storey, and are a room or two less. The entrance room in such cases is also used as a workshop.

The dwelling of the poorest classes are little better than huts, the roofs being of tile or thatch and the walls of reed daubed with mud. The space enclosed is sometimes divided into two by a partition of millet stalks, but in many cases the house has but one room.

Village houses

(2) In villages in plain areas the streets popularly known as *falia* have houses in rows on both the sides. These houses are mostly adjacent to each other with a common wall between two houses and plinths not much raised above the surface level. As a general rule, they are more roomy than those of the town people. The walls are made of burnt bricks and mortar or mud and the wood work of solid timber. The roof is tiled and in some cases there is an upper storey. About the middle of the front wall of the house is the doorway, used both by the inmates and their cattle, though in case of houses of the better sort, there is usually near one end of the front wall a separate entrance leading direct to the stable. In the case of farmers, in the open space in front of the house, sheds are kept for buffaloes, cows and bullocks.

Passing through the central door, the first part of the house is the *parsāl* (entrance room) where the head of the family receives visitors and transacts business. In the inner wall of the entrance room and opposite the opening of the street is a second door leading to the interior of the house, which consists of central space, walled off on one side and the other opening into a *kohodiu* (stable and cowhouse,), there being only a bar of wood drawn across the front of the *kohodiu* (stable,) about three feet above ground, to separate it from the central space. The wall of the central space at right angle to the *parsal* opens into three doors leading into separate rooms about 10 feet square. Of these

1. Drainage works in the city of Surat were recently completed and the flush system latrine has now come to be in vogue in the city.

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rooms that next to the front of the house is used as a store room for clothes, ornaments and grain, and the middle room is generally the *rasodu* (cooking room) and the next to the back of the house the water room. In the central place the family take their meals, and in the rainy months some sleep there; others sleep in the *parsāḷ* or upper storey if there is one. In fair weather they generally sleep in the open air outside the street door. Occasionally some houses are found with a small *chauk* in between the *parsāḷ* and the central space. There is an open enclosure known as *vāḍo* (yard) at the back, a door in the back wall leading to it. Miscellaneous articles are stored in the *vāḍo*. A bath-room may be built in it or a small enclosure either covered or open to the sky for bath purposes is provided. Some houses have an extensive back-yard which is used for storing crops and grass and raising temporary sheds for cattle in winter and summer; during the rains a few vegetables are also grown there. The houses of cultivators in middling circumstances are built on the same plan but on a smaller scale.

Houses of the lower classes and the dwellings of the so-called *Harijans* or scheduled castes are generally situated on the outskirts of the village. They are small huts thatched with grass or palm leaves, the walls of earth or of split bamboo smeared with mud and enclosing a space of about 12 feet square, divided in some cases into two rooms by a partition consisting of split stalks, the inner being used for cooking and outer for sleeping, though in many cases the whole of the interior forms but one chamber.

Forest houses.

(3) The villages in forest areas are popularly known as *vas*. These are inhabited mostly by *Rāniparaj* or *Ādivāsi* communities such as Chodhras, Dublas, the Kolgas etc. Their dwellings are huts pure and simple, sometimes with mud walls but oftener of wattled bamboo chips or sticks smeared with cowdung and mud. The roof is peaked or conical and has deep overhanging eaves. It is either covered with large flat tiles or thatched with grass or teak and palm leaves. These huts are scattered and not adjoining one to other. They have a small *chauk* (yard) in front at times open, otherwise closed by a hedge for keeping cattle if any. There are hardly two rooms inside, the drawing room, sleeping room, store room and the kitchen all located in them. The floor is of earth flattened hard and smeared with cowdung. The bathing arrangement stands without any enclosure in the open *chauk*, a flat stone or a plank being kept for sitting while taking bath. These people are understanding more and more the importance of cleanliness of their habitation and keep the surroundings clean and tidy. In a *vas* may be found a well-built house or two belonging to a landlord or trader.

DRESS

Modes and fashions in dress have considerably changed in the course of the last 30 or 40 years, partly as a result of

the wider spread of western education and partly in consideration of better suitability to altered conditions and ways of life. The more elaborate aspects of the older apparel have practically disappeared, particularly in cities. Their place has been taken by much simpler and lighter clothing. A much greater uniformity is now in evidence in the general style of the clothes worn, irrespective of past traditions and practices peculiar to individual castes. It would be interesting to have a glimpse of the different items that made up the dress of ordinary men and women in Surat district as they were found till over a generation ago. Fashions change, but a new fashion is not an entirely new creation. More often than not, it is a modification, not an entire obliteration, of what had previously been in existence.

The remarkable tranformation that has taken place in men's dress derived to some extent from the acute shortage of cloth in the difficult conditions created by World War II and the necessity of economy in its use as much as possible experienced even by very highly placed persons in society. Its price had also risen very high and discouraged buying even when stocks were sometimes available in the market. Another important factor of a psychological nature was in operation for some time, not in any one particular district but throughout the whole country. The upsurge of national awakening in the land from the early years of the century, manifest, among other things, in the Swadeshi Movement, and its later intensification after the advent of the non-co-operation movement in 1920 under the leadership of Mahatma Gandhi led to a vigorous re-thinking about the suitability of a man's clothing to the climate in which he lived. Loose and light garments which were the favourite mode of covering the body in by-gone days, were naturally found to be more suitable for a hot climate and began to come in common use. Even the more sophisticated layer of society did not fail to resort to simpler clothing. In the post-Independence days after scarcity of cloth had vanished (though prices are still high), the practice to stick to lighter clothing has persisted.

Fashions in dress as in other things continuously change, though the new pattern may not be completely divergent from the old. The following items were in vogue fifty years back in the dress of a Hindu in Surat.

Male-dress.

(1) *Pāghaḍi* (pre-formed turban), *phento* or *sāpho* (freshly folded turban), (2) *badana* (waistcoat), (3) *angarkho* (coat) and *jāmo* (long coat), (4) *pachedi* or *dupaṭṭo* (shoulder-cloth), (5) *dhotiyu* (waist cloth), and *joḍo* (country-made shoes) were in the use of the male, and (1) *Sāḍī* or *sāllo* (robe), (2) *coḷi* or *kāncāli* (bodice), (3) *ghāgaro* or *caṇio* (petticoat) and (4) *oḍhaṇi* (head scarf) in that of the female.

The *pāghaḍi* (turban) was made of fine cotton cloth with a fringe of gold brocade at each end, its length varying from

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DRESS
Modern male.

twenty to fifty yards. The way one folded his *pāghaḍī* was a guide in many cases to the caste of the wearer. For instance the Surat Vania turban was round with folds in front, a projection at the crown, and a smaller horn on the right corner ; the right side back and top were covered with the gold lace. The *jāmo,* a long coat, which in the past formed a part of the dress of men in respectable position was, except on wedding occasions, almost entirely confined to the use of a few elderely Vanias. The *pachedī* or *dupaṭṭo*, white muslin cloth, about three yards long by a yard broad, was worn either as a scarf round the shoulders or as a sash round the waist.

Very noticeable changes have taken place in the last few years in the dress of the ordinary man, particularly of the younger people in cities and towns. The long-winded eight yards *dhotiyun* is substituted by the *lehenga*, i. e. loose trousers made of long cloth of medium thickness. The old *angarkho* or *kedia* was for some time replaced by a short or long coat of westerntype ; the latter has now given way to a *sadro*, i. e. a longish shirt known as Gandhi or Nehru shirt.

The *dhotiyun* which continues to be in common use even to-day, though its place is being increasingly taken by the *lehenga* among younger people, is four or four and half yards in length (the pair consisting eight or nine yards) and forty-eight or fifty inches in width, in narrow coloured border running lengthwise to cover the whole length at both the ends. It covers the body below the waist and in wearing is folded into small folds of about three or four inches each. The majority of the folds, piled one upon the other, extend from the middle of the waist in front reaching down to the feet ; the portion required to be wound round the body is unfolded and wound ; the other end, with a few folds, is passed under thighs, reaching up to the middle of the waist on the back side and securely tucked in into the upper border A *dhotiyun* used by middle and well to do classes is made of fine or superfine cloth ; the one used by poorer men is thicker in texture.

Female dress.

The outdoor dress of a well-to-do woman included a *sāḍī* (robe), a *colī* or *kāñcalī* (bodice), and a *ghāgaro* (petticoat) worn under the *sāḍī* For holiday wear she had rich and gay clothes, some of silk with gold borders Girls when they went out wore a *ghāgarī* (short petticoat) and *oḍhaṇī*, a piece of cloth covering the body and the head. Boys wore round caps, an *āṅgarkho* (tunic), a *leṅghā* (trousers), or a *poṭaḍī* (small waistcloth). Children, both boys and girls, wore *jhablās*(frocks) and caps.

Modern female.

Women use *coḷis*, blouses, *polkas*, with or without brassiere (undergarment), and petticoats and *sāḍīs* with or without underwear, which have practically replaced the long heavy *sāllās* of old. Girls go bareheaded and wear petticoats

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and blouses but they do not use *oḍhāṇis* generally. The *champal* has become the favourite footwear for all.

ORNAMENTS.
Male.

It is no more a fashion for males to use ornaments the privileage being left for the fair sex to exercise. However, we find among Vanias, a community fond of ornaments, if fairly well off a man's everyday ornaments are a *kandoro* (silver girdle) and a *kaḍu* (gold armlet) worn above the elbow; if he is rich he wears besides these a pearl *buṭṭi* (earring) a gold or pearl *kanṭhī* (necklace), and *vinti* (finger rings); if he is very rich he adds *kallās* (wristlets) of solid gold.

Female.

The items of ornaments in the female wear are many. On festive occasions, women adorn their necks with gold necklaces and jewelled ornaments, and they also wear rich strings of pearls, braceletes, nose-rings, armlets, and jewelled ornaments set to resemble flowers. There has been a great change in the last fifty years in the shape of ornaments worn by women. New designs have been produced, and ornaments are now more costly and more artistic then before.

Apart from the modern brooches of fancy shapes used in the hair, the traditional gold plated hair ornaments, worn by women, are called *chāk*. Their ears are adorned in the ear-lobe with *buṭṭi* of real or imitation pearls or of diamonds according to the wealth of the family and other ornaments such as *loliās*, *jhāls*, and *tholiās*. On their necks they wear *hānsdis*, *dānias*, *kaliganthis*, *kanthis*, *tusis*, *Candrahārs*, *jhalmars*, or *sānklias*. Coloured ivory bracelets called *cudis* inlaid with gold and gold bracelets called *bangdis* are worn on the wrist. Anklets of silver called *kadlas* or *bagaldāṇas* chain anklets called *todās* or *sānklas*, and silver rings on the toes are their feet ornaments.

Child.

Children's feet are adorned with silver chains, *kallās*, *sānklās*, *hansḍis*, *bagaldānas*, *jhānjharas*, *rolarias* *langarias*, or *valias*. Around their waist are fastened gold and silver belts, *kandorās*, while their arms are set-off by gold bracelets, *darshaniās* and *patliś*. (The dress and ornaments of Hindus belonging to the backward class are described in a separate section).

FOOD.

Under the prevailing influence of Jainism which preaches *ahimsā*—non-injury of life—the Hindus are predominately vegetarians. Only Rajputs and some of the so-called lower castes such as *bhangis*, *mahyavanshis* and *kolis*, and all the communities known as *kāliparaj* or scheduled tribes have no scruples about taking animal food which includes the flesh of goats, sheep or fowls, eggs, and fish of all kinds. Cows and peacocks are considered holy and their destruction is resented even by non-vegetarian Hindus. Except for such

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distinction between vegetarian and non-vegetarian food, the general nature of the dishes and the way of their serving are more or less common to all.

Daily meals.

Hindus generally take two meals a day, the first between ten and twelve in the morning and the second between eight and ten in the evening. The *sravaks* (*jains*) who, because of their religious precepts, have to finish their evening meal before sunset are an exception.

For the morning meal a well-to-do family generally has *bhat* (boiled rice) of fine quality, *dāl,* (split pulse boiled and mixed with spices of various kinds) or *kaḍhi* (butter milk boiled with spices added) *phulkā* (thin round cakes of wheat flour spread with ghee), one or two kinds of *sāk* (cooked vegetables), *kacumber* (salad), (pickles,) *chutneys*, *athānus*, *murabbās* and other similar preparations to season the food, and curds or *chas* (butter milk). At the evening meal there are *puris* (fried cakes of wheat flour) milk boiled and mixed with sugar, some vegetables, and pickles. No *chas* (butter-milk) is included in the meal as it is believed not to be agreeable for health. In a family in middling circumstances the morning meal consists of rice, *dāl,* (split pulse), *roṭlā* (bread of unleavened dough) of *bajri* or *juvar* flour and vegetables of cheap quality. For the evening meal there is *roṭlā* (bread) and vegetagles with milk at times. The diet of the poorer classes of artisans, town workmen and field labourers consists of *juvar* or *bajri roṭlā* (bread) in the morning and *khichaḍi* (rice and split pulse cooked together) in the evening.

Except in households of a few urbanites who have taken to western table manners, each dining person has a *paṭlo* (a small low wooden stool) to sit upon and the meals are served in a *thāli* (a flat round metal dish) with two or three *vaḍkis* (small metal bowls) sometimes placed on a similar *pāṭlo.* A *loṭo* (water-jug) generally of brass with a *pavalu* (drinking cup) set upon it stands on one side. Curry and vegetables are served in the *vaḍkis* on the right hand side, the rice or wheat dish in the centre, and *kachumber*, *chutneys* etc. on the left of the *thāli*.

Except labourers and cultivators, who in the busy season eat thrice a day, Hindus generally take no afternoon meal. During the last sixty years the use of tea has spread among all the people. Coffee is also popular with a certain number of people. Tea with milk and sugar is taken early in the morning and in the afternoon. Some take tea brewed with pepper, dry ginger and cinnamon (*māsalani chā*) as a digestive.

Public Feasts.

Fondness for public feasts is one leading peculiarity of the Hindu mode of living in Gujarat. These public dinners at which the people are entertained fall in three kinds : trade

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The People and their Culture.

FOOD

Caste-dinner.

dinners, social dinners, and religious dinners. In the first category come the yearly dinners given by members of various associated trades, and the special dinner given by an individual member to celebrate the occasion of his joining the guild. Social dinners are of three kinds : those given by the whole caste ; those given by one member of the caste ; and open air picnics where each party brings its own supplies. The first, called *ochav* is held to do honour to some god or saint or to celebrate the anniversary of the *kuldevi* (tutelary divinity) of the caste. Of the second kind are caste feasts given by an individual to celebrate domestic events. Though this is not enjoined by religion, custom has made it all but compulsory on certain occasions, such as first pregnancy, investiture with the sacred thread, marriage and death. In addition to those there are several other occasions for optional feasts, given either to the whole caste or relatives, friends and acquaintances. *Śrāddha* (death anniversary), *vastusanti* (quietening of the spiritis in a newly built house) completing a *vrat* (religious observance) birthday, birth of a son etc. are the occasions. The third, sort are *ujāṇīs* (caste picnics) generally held by lower castes at the shrine of some divinity, either in fulfilment of a vow, or on the disappearance of a disease.

Some days previous to giving a caste dinner the host gets busy laying in supplies of grain, pulse, sugar and *ghee*, ordering firewood, engaging cooks, and collecting cooking pots. On the morning of the feast day invitations are sent round from house to house to ask the guests, and the host's friends come and try to be as useful as they can. The ordinary time for holding caste dinners is in the evening, a little before dusk. At small feasts the women and men dine at the same time in different rows ; boys, except the very youngest, dine with the men, babies and girls with the women. Men and women may dine separately and by turns at bigger functions.

The guests come dressed in their best ; each generally brings his drinking pot and cup. They take their place in rows on the ground. For each are laid a leaf tray to use as a plate. a *pāṭlo* (wooden seat) to sit upon, two leaf cups for curries, and a drinking cup. When all are seated the members of the host's family and caste people serve the dinner viands on the leaf-plate, first some salt, salted ginger, pickles, then vegetables, then sweets, and last of all split pulse curry and rice. After dinner the guests wash their hands and mouth, and betelnut and leaves are handed round.

The food consists of *śiro* (samolina mixed with *ghee* and sugar), *puri* (cakes of wheat), vegetables, and *biranj* (rice cooked in *ghee* and mixed with sugar and spices); or of *śrikhand*, *bāsundi*, and other preparations of milk, or *lādus* (sweet balls of wheat flour mixed with *ghee* and sugar), *dudhpak* (boiled milk, sugar and rice), etc. The actual number of dishes served depends

upon the season, the occasion and the money spent by the person who gives it.

*HINDU CUSTOMS

The influence of western education and the impact of modern concepts about social equality and justice, individual freedom and the place of religion in life have brought about in the course of the last half a century, remarkable changes in the customs, manners, beliefs and the general sense of values of Indian society. The pace of change has been further accelerated and its direction crystallized by the operation of the new economic forces which as a result of the introduction of mechanical power have revolutionized the methods of production, given rise to large concentrations of population in urban areas and by the very nature of the conditions of work created by them helped in cutting across that social isolation which a caste system based purely on birth had imposed in the rigidly separated innumerable communal groups of which Indian Society is made. As in every other sphere of life so also in social and religious matters, India has come out of a more or less static spell which had slowed down its vitality for a long duration and is at present passing through a period of striking transformation and transition. Examples of every phase of that evolutionary process, from the almost completely stagnant picture as presented by most of the backward classes and hill tribes to the stage of a degree of sophistication which attempts as complete a break from the past as possible are presented by the contemporary social panorama. The account given in the following pages has therefore to be related to the dynamics of transition, involving a little variation here and there in the completeness of its applicability. The details that are narrated would have as much a historical as a factual relevance and interest.

The major part of the customs of Hindus consist of ritualistic practices related to various religious ceremonies known as *saṁskaras* (sacraments). There is a great divergence of views among the *smrti* writers regarding the number of *samskaras*. They are classified as (1) *nitya* (usual) and (2) *naimittika* (special) and of these sixteen which are *nitya* must be

*The following details show the strength of the different Hindu castes and races in the district of Surat as far as it was ascertained by the census of 1872.

Under the heads of Brahmans came, exclusive of sub-divisions, forty-three divisions, with a strength of 49,991 souls (males 26,304 · females 23,687), or 9.18 percent of the total Hindu population. Of these Brahmans, Anavala Brahmans were 52.31 per cent.

Under the head of writers came three classes, Brahman-Kshatris (536), Kayasths (984), and Parbhus (241), with a total strength of 1,761 souls (males 845, females 916), or 0.32 per cent of the total Hindu population.

Under the head mercantile, trading, and shop-keeping classes, came 18,939 Vanias, belonging to sixteen divisions; 5,935 Marwari Shravaks of two divisions; 3,584 Gujarati Shravaks, belonging to four divisions; and 1,476 Bhatias and Luwanas, giving a total strength of 29,934 souls (males 13,987, females 15,947), or 5.49 per cent of the total Hindu population.

performed and the rest as they are special ones are left to choice. Like Brahmins, classes who claim a Kshatriya or a Vaishya origin perform most of the sixteen sacraments of which four, namely, *simant* (pregnancy), *upanayana* (Thread-girding), *vivāha* (marriage), and *svargarohana* (heaven-climbing) are observed with some care by all vedic Hindus.

Under the head of cultivators came four classes with a total strength of 60,441 souls (males 29,372, famales 31,069), or 11.09 per cent of the whole Hindu population. Of these, 47,157 (males 22,463, famales 24,694) were Kanbis; 8,439 (males 4,433, females 4,006) Rajputs; 4,103 (males 2,192, females 1,911) Kachhias and 742 (males 284, females 458) malis.

Of manufactures there were five classes, with a strength of 20,804 souls (males 10,843, females 9,961) or 3.81 per cent of the total Hindu population. Of these, 9,705 (males 4,941 females 4,764) were Khatris, weavers of silk and cotton; 8,598 (males 4,344, females 4,254) Ghanchis, oil-pressers; 1,188 (males 830, females 358) Bhavsars calico-printers; 1,078 (males 604, females 474) Chhipas, calenderers; and 235 (males 124, females 111) Galiaras, dyers

Of artisans there were seven classes, with a total strength of 30,565 souls (males 15,279, females 15,286) or 5 61 per cent of the total population. Of these 5,926 (males 3,373, females 2,553) were Sonis, gold and silver smiths; 7,871 (males 4,036, females 3,835) Suthars, carpenters; 1,342 (males 479, females 863) Kansaras, coppersmiths; 794 (males 340, females 454) Kadias, bricklayers; 129 (males 49, females 80) Salats, masons; 2,939 (males 1,530, females 1,409) Luhars blacksmiths; 5,461 (males 2,478, females 2,983) Kumbhars, potters; and 6,103 (males 2,994, females 3,109) Darjis, tailors.

Under the head of bards, songsters, and actors, came three classes, with a total strength of 555 souls. or 0.10 per cent of the whole Hindu population. Of these, 412 (males 127, females 285) were Bhats, bards, and Charans, genealogists, 98 (males 92 females 6) Bhawayas, strolling comedians; and 45 (males 38 females 7) Ghandraps, songsters.

Of personal servants there were three classes, with a total strength of 5,395 souls, or 0.99 per cent of the total Hindu population. Of these, 3,851 (males 2,148, females 1,703) were Hajams, barbers; 1,485 (males 688, females 797) Dhobhis, washermen; and 59 (males 33, females 26) Bhistis, water-drawers.

Of herdsmen and shepherds there were three classes, with a total strength of 7,639 souls, or 1.40 per cent of the total Hindu population. Of these, 6,689 (males 3,665, females 3,024) were Bharwads; 730 (males 367, females 363) Rabaris; and 220 (males 74, females 146) Ahirs.

Of fishers and sailors there were three classes, with a total strength of 20,749 souls (males 8,568, females 12,181), or 3.81 per cent of the whole Hindu population. Of these, 5,887 (males 2,481, females 3,406) were Kharwas, seamen; 639 (males 247, females 392) Bhois; and 14,223 (males 5,840, females 8,383) Machhis. Besides their regular occupation as fresh-water fishers, the Bhois are engaged as palanquin-bearers; the Kharwas, as tile turners as well as sailors; and the Machhis, as fish-sellers as well as boatmen.

Of labourers and miscellaneous workers there were fourteen classes, with a total strength of 492,606 souls (males 9,257, females 43,349,), or 17.09 per cent of the whole Hindu population. Of these, 78,651 (males 41,865 females 36,786) were Kolis; 5,088 (males 2,589, females 2,499) Golas, rice-pounders; 2,21 (males 1,266 females 948) Marathas; 3,133 (males 1,620 females 1,413) Bhandari4 toddydrawhs; 126 (males 86, females 40); Rajbharas, makers of the warps raj, 268 (males 162, females 106); Gondha, labourers; 1,009 (males 648, females, 361) Waghris, fowlers and hunters; 883 (males 439, females 444) Ravalia, cotton-type-makers; 452(males 228, females 224) Bhadbhunjas, grain parchers; 373 (males 162, females 211) Kamalias, makers of blankets, *kamli*; 219 (males 93, females 126) Wansforas, or bamboo-splitters; 51 (males 19, females 32) Timalias, makers of iron nails; 23 (males 12, females 11) Polmas, beggers; 40 (males 24, females (16) odias, diggers; and 76 (males 42, females 34) miscellaneous.

Of aborigines there were nine classes, with a total strength of 180,107 souls (males 89,800, females 90,307), or 33.07 per cent of the total Hindu population.

CHAPTER 3

The People and their culture

CUSTOMS

Pregnancy.

Rakhadi.

Two ceremonies are performed at the husband's house in honour of the woman's first pregnancy. The first which generally takes place at the beginning of the fifth month is known as *pancamasi*, and the second which is held in the seventh month is called *simanta*. The *pancamasi* ceremony which corresponds with the vedic *samskara* of *vishnubali* is popularly known as *rakhadi* (guarding), and *simanta* which corresponds with the vedic *samskara* of *simantonayana* is popularly known as *Kholobharvo* (lap-filling). The family priest or astrologer prescribes the lucky days for both the ceremonies. As a rule, the *pancamasi* ceremony is performed in the fifth month, but when this is difficult or inconvenient it is performed on the *simanta* day.

On the auspicious day selected for the *pancamasi* the pregnant woman wearing rich ornaments and clothes worships the house-god or the *gotraj* (family deity) and her husband's sister binds round the woman's right wrist a silver or gold amulet called *rakhadi* (guard), receiving a money present in return. Close to the *rakhadi* is tied a piece of black silk in which are wrapped an iron ring, five grains of Indian millet, some redlead and oil from an image of Hanuman, particles of gold and silver, and dust from four cross roads. The *rakhadi* may be strung in a *nadachadi* (red thread) mixed with silver thread. This *rakhadi* is worn with the object of keeping the woman and the child from evil influences. After the ceremony a dinner is given generally to friends and relations, and in the case of the rich to the whole caste.

The *simanta* (hair-parting) or more commonly *kholobharvo* (lap-filling) takes place on any lucky day between the sixth and the eigth month of a first pregnancy. For four days before the ceremony the pregnant woman is rubbed with *pithi* (yellow turmeric powder) and in the evening wearing rich clothes she sits on a raised seat among a crowd of admiring women

Of these, 69,759 (males 33,860, females 35,899) were Dublas, 45 259 (males 22,696 females 22,563) Dhondias; 29,923 (males 15,839, females 14,084) Chodhras; 18,449 (males 8,731, females 9,718) Naikas, 8,241 (males 4,098, femaels 4,143) Gamins, 5,835 (males 3,102, females 2,733) Bhils, 1,728 (males 1,002, females 726) Kukna; 819 (males 421, females 398) Mangclas; and 94 (males 51 females 43) Kathodias.

Of workers in leather there were two classes, with a total strength of 7,955 souls (males 4,242, females 3,713), or 1.46 per cent of the total Hindu population. Of these 4,860 (males 2,487, females 2,373) were Mochis, shoe-makers, and 3,095 (males 1,755, females 1,340) were Khalpas, tanners. Under the head of Mochis came three subdivisions, the Chanlagars, or spangle-makers, the Dhalgars, or shield-makers; and the Dabgars, or drum-makers.

Of depressed castes, there were four, with a total strength of 31,643 souls (males 15,380, females 16,263), or 5.81 per cent of the whole Hindu population. Of these, 585 (males 341, females 244) were Garudas, priests to the Dhers, 29.375 (males 14,143, females 15,232) Dhers, sweepers; 1,626 (males 870, females 756) Bhangias, scavengers; and 57 (males 26, females 31) Mahrs, or sweepers from the Deccan.

Devotees and religious mendicants of various names -Brahmacharis, Wairagis, Gosais, Sadhus, and Jogis numbered 1,587 (males 1,097, females 490), or 0.29 per cent of the entire Hindu population.

friends and relations some of whom sing songs befitting the occasion.

Into her lap, while women sing and music plays, a *saubhagya vanti* (unwidowed woman) who has never lost a child drops five pounds of rice, a coconut, five betel-leaves, five cloves, five cardamoms, five betelnuts, five lotus seeds, ten flowers and a rupee. The pregnant woman falls at the feet of her mother-in-law to whom she hands the articles dropped into her lap. Silver coins are distributed to the mother-in-law and other relations.

Simanta.

On the fourth day the woman goes to bathe at a relations. On her way back followed by women singing songs she walks under a moveable cloth canopy on a cloth spread for her. At every step her sister drops a betelnut which her husband's sister picks up. At the door-step her mother-in-law waves round the woman's head a miniature plough and other articles as at a marriage. While crossing the threshold, she carefully avoids touching it. Her husband meets her there and they then both proceed to perform a worship of the *gotraj* (house-god). When the worship is over, a *mosalu* (party) consisting of the woman's father, mother and brother all richly dressed come with presents of sweetments, rich clothes and household articles and present the same to her husband and her parents and other members of the family. The same evening the husband's father gives a caste dinner. For some days after the ceremony at the invitation of her friends and relatives the woman attends dinners and receives presents of clothes or of money, and then goes to her father's house for delivery and may stay on till the child is three or four months old.

Among communities who follow Vedic ceremonies, on the *simanta* day, a sacred fire is lighted and brightened by pouring clarified butter over it. The woman sits in front of the fire dressed in white with a peacock feather, an arrow-head and spindle needle over her head; and a rosary of 108 *umarda* (ficus glomerata) figs round her neck. Her husband takes his seat near the altar, sips *acamana* (water), contemplates the god Ganapati, and makes a *samkalpa* (solemn declaration) to perform all the pregnancy rites from *garbhadhana* to *simantonayana*. He then makes offerings of clarified butter to the sacred fire to make up for the neglect to celebrate each of the rites at its proper time, the priest repeating the appropriate *mantras* (holy text) all the time. Next he performs the *pumsavna* (male-making) rite with offering and spells, and drops thrice into the right nostril of his wife juice from the crushed root of a banian tree.

Birth.

The young wife generally goes to her parent's house for her first confinement. In old days when education had not much spread and medical facilities were not available on a large scale, confinement used to take place in rooms which were not airy and without the assistance of trained nurses. Usually an

untrained or experienced midwife available in the locality was called. Even now, in villages and backward areas and among uneducated people, the same practice continues to exist to some extent. But in cities and in educated families, increasing use is being made of lying in hospitals and assistance is taken from qualified nurses and doctors. On the birth of a child the family astrologer or some relation is asked to note the time. Some time after the child is born the midwife cuts its navel cord and buries it after birth in a corner of the compound in the front of the house.

In some families if a son is born the wife's sister anoints the father with scented oil and bathes him receiving a present according to the father's means.

According to orthodox practice, nine nights the mother is kept in a closed room with her head tightly wrapped with black cloth. The newborn babe is laid on a wooden stool close to the mother's cot. For three days the child is given a cotton wick soaked in *galathuthi*, a mixture of caster oil, ghee and honey, and then put to the mother's breast. During the first nine days friends and relations drop in to inquire after the health of the mother and child. For ten days the members of the husband's family observe *vrddhisutaka* (impurity after a child-birth) and are careful not to touch household god or perform daily rites or draw water from the house cisterns or touch *papad* (wafer biscuits) and *athanu* (pickles). It is held that the impurity extends to all connected on the fathers' side to the seventh degree. It lasts in the case of a male child for ten and in the case of a female child for three days.

Chathi-Pujan.

On the sixth day the *chathi pujan* (sixth-day worship) is performed. It is believed that on that night goddess *chathi* writes on the child's brow its future. In honour of the goddess a configuration[1] of articles such as a piece of paper, an ink-stand a red-pen, *kanku*, rice, flowers, copper coins, a cloth-piece, and a ghee lamp etc. is laid on a footstool near the mother's bed and worshipped. The things are taken away on the following morning. On the morning of the tenth the mother and the child are bathed and moved to another part of the house while the bedding is changed and the floor of the lying in room is smeared with cowdung.

Among certain Brahmins the mother and child are bathed on the twelfth day and are taken into the open yard behind the house to worship the sun. Similar is the custom among Rajaputs.[2]

1. The articles in the *chathi* configuration differ community-wise. Among Brahmins it includes the six goddesses of luck represented by six heaps of wheat or rice with a betelnut and a copper set on each heap. The Meshri Vanias include 'a piece of man's coat' while the Rajputs keep a sword covered with a *pamri* (silk cloth nearby).

2. *Niskarmana* or *adityadarshana* (taking the child out of the house to see the sun) is prescribed as a *Samskara* by some *grhyasutras*.

On the twelfth day the *baran balians* (twelve sacreds) are worshipped. Twelve small heaps of rice are laid on a footstool, and near them twelve betelnuts, twelve betel leaves and twelve copper coins. The mother then worships the *baran balians* with *kanku* and flowers and so also the well, the door-post and the *khal* (house privy).

Naming

Generally on the twelfth day, or on some other suitable day, the child's naming ceremony takes place. The husband's female relations go to the mother's and present the child with ornaments and clothes. The child is dressed in some of the clothes thus presented and the father's sister lays it on a white sheet of cloth along with seven *pipal* (ficus religiosa) leaves and seven betelnuts. The four ends of the cloth are raised by four children and the babe is rocked four times, the children and the father's sister singing at each swing. "*joli poli pipal pān, phoie pādiyu nām*. (The sheet, the betel, and the pipal leaves. From his aunt the name the boy receives)." At the end of the swinging and rocking the father's sister names the child. She is then presented with a *san* and silver coin by the mother's parents, and to other women and children are distributed *pohas* (fried and pounded rice), cocoa-kernal, *gur* and copper coins. Generally if the babe is a girl no ceremony is performed beyond adopting a name suggested by an astrologer.

On some lucky day within three months of the birth the mother returns to her husband's house, her parents presenting their grandchild clothes, ornaments and a cradle.

Botan.

The *botan* or weaning ceremony (corresponding to the Vedic rite of *Annaprasana*, eating cooked food) may be performed in the sixth or eighth month after birth when, the maternal uncle or some other near relation gives some *khir* (milk boiled with rice and sugar) laid on a rupee for the child to lick.

The *caul* (head-shaving) corresponding to vedic *samskara* of *cudakarma* is performed as a rite among Brahmins at the boy's third or fifth year or now-a-days at the time of the *upanayana* (thread-girding) ceremony. As a purificatory rite the ceremony has to be performed on an auspicious day, and the *sutras* prescribe an elaborate ritual which includes as the principal act the cutting of the hair of the child, and other subsidiary acts such as the performance of *homa*, feeding of priests, receiving their benedictions and giving of *daksina* and the disposal of the cut hair in such a way that no one can find them.

Among many other communties a similar ceremony known as *badha utaravi* (obstacle removing) is performed in fulfilment of a vow observed for the well-being of the child. The child's hair is ceremonially cut and the hair- clippings are offered as an oblation to the family deity or a goddess.

CHAPTER 3.

The People and their Culture.

CUSTOMS

Caul.

Upanayana or Janoi.

The *upanayana* or *janoi* (thread-ceremony) as it is called in Gujarati, is a vedic *samskara* involving various acts one of which is the investing a *batuk* (boy) with a *yajnopavita* or *janoi* (sacred thread). Hindus claiming a place in the first three *varṇs* (classes) *i.e.*, the *dvijātis* (twice-born) consider *upanayana* as an essential *saṁskāra* (purificatory rite), which formally initiates one to *brahmacaryāśrama*, the stage of studenthood which, when concluded with the rite of *samāvartana* befits one to marry or enter *gṛhasthāśrama*, the householder's stage.

In Gujarat, Brahmins and some allied communities, such as Bramhaksatris, Māthura Kayasthas etc. consider themselves by tradition entitled to undergo the *upanayana*. Rajputs as *Kṣathiyas* claim the right to wear the sacred thread with the same formalities as Brahmins, but only a few are careful to invest their boys at the proper age.

Muhurta.

The boy's father, when he intends to perform *upanayana* of his son, fixes in consultation with an astrologer the lucky day and time for girding the boy. In the selection of the proper time for the ceremony the astrologer is guided by intricate rules about the proper months, *tithis* (days), and times for *upanayana* as laid down in works like the *saṁskāra-prakāśa*, *nirnayasindhu* and *dharamasindhu*. He also pays special attention to the month in which, the constellation under which, and the day on which the boy was born. The thread-girding always takes place between morning and noon, never after midday.

Mandava

When the ceremony is to be performed on a grand scale, preparations begin a few days before the thread-girding day. Drummers and pipers are engaged. A *māndvā* (booth or porch) is built and *kanku* marked invitation letters sent to even distant relations and friends. Two or three days before the appointed day a carpenter brings four wooden posts called *māṇekstambha* (ruby pillers) of which the women take charge after throwing rice and red-powder over them. Then the boy worships the posts and while the women sing a carpenter sets them up one at each corner of the booth or bower. The carpenter is given molasses and wheat and all children who are present receive fruit, dry dates and molasses. The day the *māndavā* is built the *ghāṇā* (rice-pounding ceremony) is held and the boy is rubbed with turmeric paste. On the morning of the rice-pounding day the family priest makes the boy worship the god Gaṇapati and the *mātrikas* (mothers) who are represented by two large painted earthen vessels with a small pot in the neck of each and in the pot's mouth a coconut and mango leaves. A clarified butter lamp is lighted and two baskets called *ranyādeva* holding powdered cowdung and grains of wheat are placed close by and a space is surrounded with quart lines and fresh smeared cowdung. From this day till the thread-girding day the women of the family sing songs both in the morning and evening each time receiving some presents.

Propitiatory rites.

Prior to the ceremony of *upanayana* proper, a number of propitiatory rites which are required to be followed before the performance of a *saṁskāra* are gone through. They are the worship of Gaṇpati and *gotraj* (family deities), *vṛiddhi* (increase), *abhudayika* (prosperity) *śrāddha*, *puṇyāhavācanu* (holy-day blessing), *devapratiṣṭhā* (god-installing), propitiation and consecration of *maṇḍapa-devta* (booth-deities), and *mātṛkāpūjana* (worship of the the *mātrkas*). A *grahamakha* (sacrifice to the planets) may also be performed any day previous to the thread-girding. It is also a practice to perform before the *upanayana* expiatory rites for the late performance or non-performance of *saṁskāras* occuring earlier.

Early morning of the thread-girding day the spirit worship suited to joyful events is performed. A quartz square is traced in the booth, earthen altars are built, and three *pāṭlās* (wooden stools) are laid out. When the boy and his parents have bathed, the family priest asks them to perform the ceremony. They come out of the house and take their seats on the three stools in front of the alter. The father begins the ceremony by giving away some cash to make up for his neglect in failing to perform the *saṁskaras* at their proper time . The family priest places a coconut and some wheat in the boy's hands and leads him to the *gotraj* (family goddess) before whom with a low bow the boy lays the coconut and wheat and returning sits between his parents. First to perform the *jātakarma* (birth-rite) a fire is lighted and the father taking clarified butter, honey, curds and water in a pot dips a gold ring into the mixture and drops what he gathers into the boy's mouth. The father touches the boy with his right hand saying "Be thou as hard as a stone or a pickaxe and pure as gold. Mayest thou who art no other than my own soul live a hundred years." Next comes the name-giving rite; the father having ten times dropped clarified butter into the fire writes the intended name on a betel leaf with redpowder and speaks it loudly in to the boy's right ear. The worship of the Brahmans who recite holy blessings ends the ceremony. After the name-giving comes *nishkramaṇa* (going-out ceremony),the eighth of the vedic *saṁskara*, in which the father or mother of the boy holding in one hand a coconut, a betelnut and some cash and flowers and the boy in the other walks out of the house, offers the coconut and other articles to the sun and shows the sun to the boy.

Yajurvedi Brahmans may perform on this occasion the ceremony of *karṅa-vedha* (ear-slitting). The place in which the slit is to be made is marked with vermilion and the boy is fed with sweetmeats. The right ear is first bored then the left one. Next follows the *annaprāshana* (feeding) ceremony. Rice is cooked in a pot placed over the fire on the alter and out of it four offerings are made to the sacred fire kindled on the occasion. A little of the rice is then placed in a gold or silver dish mixed with curds and clarified butter and sugar. The mother places the boy in her lap and takes a little of this mixture on a gold or silver

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coin and feeds him with it. Then comes the ceremony for ascertaining the calling or profession which the boy will take to in after-life. The boy is seated on the ground and before him are placed a manuscript, a piece of cloth, a pen and ink-stand, and a silver coin. The boy is asked to take any one of them and the article picked up indicates the profession he will follow in after-life. Then comes the ceremony of *caula* or *cūḍākarma* (tonsure) and of *upanayana* (thread-girding).

THE RITUALS

The *upanayana* ceremony proper consists of various ritualistic acts. They are--

(1) *Agnisthāpana*: lighting of agni (sacred fire) on a *sthaṇ ḍila* (altar) and offering of prayer to it.

(2) *Homapurvaṅgam* : (first part of the sacrifice):—after establishing the sacred fire with an appropriate ritual, the father makes offerings of *ajyā* (ghee) oblations to various deities, e.g., prajapati, agni, soma, etc.

(3) *Agnisthāpana* : after the first part of the sacrifice is over, the *kumāra* (boy) with folded hands approaches the *ācārya* (preceptor-priest) and makes a request to initiate him to *bramhacaryasram* (stage of studenthood). The *ācārya* grants his request hands over to him a consecrated *yajnopavita* (sacred thread), and a *daṇḍa* (staff) of *patāsā* and gives him general instructions as to how to acquire knowledge.

(4) *Sūrya-avekṣṇādi*: the *ācārya* takes the *kumāra* out to see the sun and makes him repeat a prayer to the sun.

(5) *Upanayana-pradhān-homah*: the principal sacrifice of the ceremony is gone through. The *ācārya* makes four offerings of *samidhā* (sacred fuel-sticks) to the fire and then the *kumāra* makes an offering of one *samidhā* and then wipes off his face thrice with the words purporting "I anoint myself with lustre and may agni and indra bestow on me insight, offspring and vigour".

(6) *Homasya-uttarāṅgam* : here the *ācārya* concludes the sacrifice with the final oblations.

(7) *Marjana*: the *ācārya* sprinkles sacred water over the head of the *kumāra* and towards all directions.

(8) *Saṁsthājapa*: the *ācarya* and *kumāra* both stand and offer prayer to *yajurdevata* (sacrificial god).

(9) *Sāvitri-upadesa*: here the *kumāra* bends his knees, embraces the teacher's feet and requests him to recite the verse sacred to *savitri* and the teacher recites *pada* (syllable) by *pada* the *sāvitri* verse and makes the *kumāra* repeat it syllable by syllable.

(10) *Vrata-bandha:* here the *ācārya* advises the student how to behave in his career of studentship, and tells him of the rules and observances to be followed by a *bramhacāri* (student).

(11) *Medhā janana:* the *kumāra* (now a student) faces the east and prays the goddess *medhā* to give him knowledge and wealth.

(12) The parents, with their son sitting to their right conclude the whole ceremony with a prayer to God, the assembled priests bless the 'student' and the father pays them *daksina.*

These rituals in the pristine ceremony have added to them various popular practices as given below:—

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When the *cūḍākarma* (tonsure) is over the boy is bathed and dressed in rich clothes with ornaments. The father or some disciple of the family priest of the same age as the boy leads the boy to the priest who seats him on his right. The boy asks priest to make him a *bramhacāri* (vedic student) and the priest takes off the boy's clothes and girds him with a *muñj mekhalā* (girdle of *muñj* grass). Round his neck is fastened a sacred thread prepared by a Brahman who spins a cotton thread as long as ninety six times the breadth of four fingers. The thread is first folded into three and again trebled and the folds held together by a knot called *brahmagranthi* (brahma's knot). The boy is given a new cloth five cubits long, a *khakhar* (butea frondosa) staff as tall as the upraised end of the boy's top knot, a piece of deer skin, and *langoṭi* (loincloth). A *patlo* (wooden stool) is set near his father and the boy is seated on it facing east. The preceptor takes water into his hollowed hands and offers it to the boy who thrice sips it. The preceptor then gives the boy a coconut and taking him by the hand goes out of the booth and both bow to the sun. On their return to their seats the preceptor takes the boy's right hand and asks him to state his name and to say whose *brahmacāri*, he has become. When the boy mentions his name and says he is his preceptor's *brahmacāri*, the preceptor lets go the boy's hand, takes him round the sacrificial fire, and seating him by his side drops nine offerings into the fire. He then says to the boy: "You have now become a *brahmacāri*,; you must observe religious exactness; you must sip a mouthful of water before taking food; you must not sleep during the day; you must control your speech; you must keep alight the sacred fire and cleanse your mouth after taking food." The *mahānamyo* (great-name-telling), the thirteenth of the vedic *saṁskara* is then performed. The boy sitting on the north of the fire bows to the preceptor and begs to be initiated into the mysteries of the sacred verse; the boy and his preceptor or father are coyered with a shawl and the preceptor thrice whispers the sacred verse (*gāyatri*) into the boy's right ear first syllable by syllable, next phrase by phrase, and then the whole verse. That no one, whether Brahman or sudra, man or woman,

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may hear the verse all present go to some distance. Then the shawl is taken away and all return to their seats and kindle the fire by putting on *samidha* (butter-smeared sacred wooden chips) three times. The boy holds his hands over the fire and raises them in front of his mouth. He takes the ashes from the altar and marks his forehead with them. He bows to the preceptor and the fire and bags alms from his mother. The mother brings on her head a bell, a metal plate marked with a square tracing of redpowder in which are set four balls of sweet rice each weighing about a pound, a rupee and a coconut. The boy's brow is marked with redpowder and the plate is handed to him. If the boy is betrothed* his mother-in-law or any other woman of the girl's family makes a similar present. In the absence of any member of the betrothed's family the boy's maternal aunt presents the articles mentioned above.

When the almsgiving is over the fourteenth of the vedic *saṁskara samāvartana* (return of the student) begins. In this ceremony water from eight new pitchers is poured in an unbroken stream over the boy's head who is then rubbed with turmeric powder and bathed. The boy makes over to the priest the loincloth, the staff, the deer skin, and the grass ropes and puts on new clothes presented by his maternal uncle and the staff in his hand. He presents the Brahmans with money and they repeat blessings over his head. His relations give him a rupee or two.

Samavartana.

In the afternoon male and female relations arrive. The boy is dressed in a coat, waistcloth, shoes and turban, flower garlands are hung from his head and round his neck, in his right hand he carries a bamboo to which is tied a piece of cloth containing seven cakes, a manuscript of the *veda* is put under his arm and an umbrella is held over his head. As the procession moves music plays and women sing. When it reaches the street corner the procession stops. Two wooden stools are placed at the street corner on one of which is set the manuscript of the *veda* and on the other the boy. The manuscript is worshipped and round it a circle is drawn on the ground by pouring out water to represent the seven seas. The boy is advised to give up the idea of travelling in search of study as he will have to cross seven oceans and meet with other difficulties. When the worship of the oceans is over the boy rises holding the *veda* under his arm and the staff in his right hand. He then runs away and after he has gone a little distance his maternal uncle runs after him to catch him. When his uncle has caught him, he promises the boy if he returns home he will get him a wife. The uncle then takes the boy in his arms and walks under a shawl held over his head by four men. All the way as the procession returns to the boy's house Brahmans keep reciting vedic *mantras* (texts). On reaching home his mother waves water round the boy's head and makes

* It is customary for Gujaratis to perform *sagai* (betrothal) at an early age, though with the spread of education the custom is disappearing among the more advanced section of the community.

him bow low before the family goddess, the family priests, and the family elders. In the evening a caste dinner is given, or at least friends and relation are fed. For some days following the boy goes out to dine at the house of different relations and friends and according to custom is given copper or silver coins.

MARRIAGE.

According to Hindu Philosophy, marriage is among the most significant and most sacred obligations of human life. In the orthodox Hindu view, marriage is not a contract but a sacrament which is indissoluble ; the union represented by marriage must be strictly confined to members of the same caste and even the same sub-caste ; within the caste limitation, it must not take place between members of the same gotra or something like an enlarged family clan. There must be at leastx a minimum degree of astrological agreement, as determined by the position of the stars, between the horoscopes of the would-be bride and the bridegroom. Marriages must be solemnized only during particular months of the year and on particular days and at particular hours which may be indicated to be auspicious according to the horoscopes. Apart from these religious injunctions and inhibitions, there came to be built up over many generations, in connection with marriages, very elaborate social customs and practices which became an integral and indispensable part of the whole ceremony. The celebrations lasted generally for a week and often longer. Such prolonge festivities were in keeping with, and probably the consequence of, the leisurely atmosphere of the spacious days before the advent of the industrial revolution when life did not present many complex problems.

With the intellectual ferment and spirit of questioning generated by the emphasis on reason and scientific analysis in modern education, and in the context of the tremendous tempo and tensions of the industrial age, many of the old institutions as well as social customs and practices appeared to be both unfair and insipid and contrary to the new values which were taking the place of the old ones in the minds of the educated people. Public opinion gradually but unmistakably underwent a change which was reflected in the new attitude to social reform and in the new social laws enacted by popular legislatures. Child marriage has been abolished. The justice and the desirability of incorporating a small degree of contractual content even in holy wedlock was recognized and divorce under certain extreme circumstances is now permitted, though actual dissolutions of marriages consequent on such permission are very infrequent. Freedom to marry outside the caste had been conceded by law long ago. But it is only recently that hostility to such marriages has lost its former agressiveness and unbearable sting. Marriages of persons belonging to different sub-castes of the same caste have now become a routine affair. Marriages of persons belonging to different castes have ceased to create much of a sensation

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or lead to social ostracism. Not that such intermarriages have become a common occurrence. They are still comparatively rare. But the critic's angle of vision in regard to them has now more the substance of indifference and apathy rather than of antagonism as in the past. Beyond rousing some curiosity and probably some inconsequentional criticism, they have ceased to produce, at least in urban areas, any grave repercussions to the detriment of the marrying couple or their relatives.

For the Hindu, marriage is a *saṁskara*-a sacrament-that can be established after going through a number of ceremonial details which have their basis in the *grhya sutras*. In its essence it is a ritual and a formality through which an individual has to go to be able to start his or her life in *grahasthasrama i. e.*, the householder's stage.

The marriage customs of the higher and lower caste groups in Surat do not differ in important details. Except for *adivasis* and *harijans* who may have priests of their own. the ceremony is conducted by *gors* (professional priests) who are Brahmins, and are supposed to use the *vedic* text in the ceremonies of Brahmins and allied communities and the *pauranic* one for those of others.

The general obligation set up by religion for a Hindu to marry is restricted by numerous rules which to some extent differ communitywise and are known as customs of endogamy (marrying in), exogamy (marrying out) and hypergamy (marrying higher or lower). There are also customs regarding widow-marriage and child-marriage.

The rules of endogamy have now come to mean that members of the same *varṇa* (class) who at the same time belong to the same *nyāta* (caste or sub-caste) could only marry each other. The Brahman, *vania, rajput* and *kanbi* castes must marry their girls within their caste or sub-caste. Hypergamy breaks this rule to some extent ; *e. g.* hypergamy is found among the *leva* and *kadva kanbis* who are divided into a landlord class (*pāṭidār*) and a tenant class (*kanbi*) of cultivators. Patidars are hypergamous to *kanbis*, that is to say they will take a wife from them but will not give daughters to them in Marriage. There is a further sub-division of *pāṭidars* who call themselves *Kulia* or men of family and will not give their daughters to Pātidars who are called *akulia* or men of no family.

New endogamous restrictions develop when the social position of groups among the same caste gets differentiated ; *e. g.*, Brahmans living in towns do not give their daughters to their castemen living in villages, though they take brides from the latter. Even people of the same caste but belonging to different towns do not intermarry. The village people acknowledge their inferiority and marry their daughters to towns

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Rules of Endogamy

people, • though the latter refuse to give theirs to villagers. In many of the Gujarat castes endogamous local groups of villages have been formed called *gols* and a man has to select a bride within his own *goḷ*. An endogamous division called *tad* (literally a crack) may get formed among caste people belonging to the same place or district, who divide themselves into two or more *taḍs* owing to difference of opinion and their feelings towards each other are, more often than not, highly estranged which is not the case with *goḷs*.

The *sāstras* ordain that a person should not marry in his own *gotra** or *pravara*, and within six or seven degrees of relationship on the father's side and four or five on the mother's side. Only Brāhmans, as they know their *gotra* can abide by the rule of *gotrā* exogamy. The rule forbidding marriage within the same *pravara* is not observed by any of the Brāhmans of Gujarāt. There would be found many Brāhmans who do not even know their own *pravara*. Only the *gotrā*. of the father and not of the mother is considered when a marriage alliance is contemplated. Anāvāla Brahmanas, however, may marry within the same *gotrā* provided the couple are outside the first seven degrees of relationship. Among the Audich Brahmans if the surname is different marriage can take place even if the *gotrā* be the same. With the Madha Brahmans if the *pravara* is different a marriage can take place within the *gotrā* . It 's to be noted that the *gotrā* is a Brahmanical importation to which most of the high and middle classes seem to have succumbed as some *vanias* and *kumbhars* claim a *gotrā* where it serves no useful purpose. Among *rajputs*, the place of. *gotrā* is taken by the *clan*, *e.g.*, *jadeja*, which is an equally strictly exogamous division.

Monetary† consideration

Monetary consideration is almost invariably the condition at a marriage. But regarding it no uniform rule prevails. Some castes put a price on the bride, others on the bridegroom and there are some who do not put a price on either. A few have the custom of having price on both. The five commonest arrangements are : (1) the bridegroom settles a certain sum on the bride called *pallu* which becomes a part of the *streedhan* (dower) ; (2) the bridegroom receives *pāheramni* or *paithan*, a dowry or portion with the bride ; (3) the bridegroom pays a sum of money to the bride's father ; (4) no stipulation is made about dowry or portion ; (5) The marriage is agreed to on the understanding that a counteralliance will follow. Of these arrangements the first is the commonest ; the second is

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* *Gotras* are the names of several eponymous ancestors, each *gotra* containing exogamous sub-*gotras* named after more recent eponymous ancestors and called *pravaras*.

† Recently, by an act passed by the Central Legislature the dowry is prohibited. Monetary consideration as a condition at marriage is therefore illegal now. The system described in this paragraph is one that was existing in the past.

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found among *anavalas* and certain other Brahmins, *patidars* (of Charotar), *rajputs*, and *brahma ksatris* ; the third occurs when the bridegroom is a widower or of inferior family; the fourth is found among very few sub-divisions of Brahmins and extensively among lower classes ; and the fifth which in essence is a return marriage is adopted to gain brides for men of low *kul* (family) or for those who cannot otherwise secure them. The actual cash paidto the bridegroom's father is called *vānkḍo* and it is settled at the time of betrothal. Among the two Anavāḷā hypergamous groups namely, *desais* and *bhathelas*, a *desa* demands *vānkdo* for his son from a *bhathela* girl's father who has not to pay it when marrying in his own group. A further sum nearly half as much as the *vānkḍo* is demanded from the bride's father when the bride goes to stay at her husbands house. *Paithan*, (literally settlement) a word of the same meaning *vānkḍo* is used among *pātiḍars* and when a man of low family marries his daughter in a high family he has to pay a large amount as *paiṭhaṇ* to the bridegroom's father. *Paiṭhaṇ* is less when both the families are of equal status. Those who have to spend a large amount at their daughter's wedding try to balance up by obtaining money at their son's marriage. In place of the old custom of receiving actual cash, the modern bridegroom may demand money indirectly.

Marriages are generally arranged by the parents or elders of the boy and the girl. Social conditions, however, among advanced classes have by now improved to the extent of allowing the boy and the girl, if not to court each other at least to cultivate enough acquaintance to be able to make a free choice.

There is no fixed rule as to which of the parties should make the offer. Generally among the higher and well-to-do classes the negotiations commence with the girl's party while among the poor and the backward, the boy's father or his relation makes the approach.

When there are no objections on grounds of exogamy and endogamy the horoscopes of the girl and the boy are compared, and if found agreeing the girl's father chooses an auspicious day for the betrothal (*sagai* or *vivaha*) and sends a male representative or the family priest to the bridegroom's house to make the formal announcement. The messenger or the priest is fed and given a rupee or two and as a sign of joy the boy's father distributes sugar among his friends and relations. Betrothals are always verbal and never written. A verbal betrothal is binding, but its performance may be avoided by payment of a fine. Among some communities even the offer of a better match may be considered reason enough for breaking the betrothal. A general rule prevails that if either of the parties to be married becomes maimed or invalid the other is freed from the promise.

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Betrothal.

To complete the contract of betrothal, among some communities the bride's father makes a symbolic payment of Re. 1 on the betrothal day to the caste fund. The boy's father then sends to the bride a ceremonial present called *vasanani matali* consisting of dress, ornaments, and sweetmeat and invites her to *gaḷyā mo* (mouth-sweetening)ceremony at his house, which the bride attends dressed in the presented dress and ornaments. The boy and the girl are then in turn invited at their father-in-law's house on holidays and given presents.

The marriage ceremony is held some days after the *sagai* or *vivāha* (betrothal). It may be put off several months in case a death occurs in either of the families.

The auspicious day for the wedding is fixed in consultation with an astrologer. At the instance of the girl's parents a day on which the moon is favourable both to the girl and to the boy and which is auspicious in all other respects is fixed for marriage.

Preparations.

Great preparations are made on both sides. The house is coloured and white-washed. Related womenfolk are invited to come and help in preparing *pāpaḍ, vaḍī* and *sev* (kinds of wafer biscuits, balls and vermicelli) for use at caste-dinners and distribution among caste people. The building of the *māṇḍvo* (marriage porch or booth) is begun a few days before the wedding. Drummers and pipers are engaged. The *ghana* (rice-pounding) ceremony is held and the bride and bridegroom's face, hands and feet are rubbed with *pithi*, a mixture of turmeric powder, water and perfume at their respective house by *saubhāgyavantis* singing songs. This *pīthi*, rubbing takes place each morning till the marriage day ; and every night songs are sung by ladies of the house and by relations and friends who assemble for the purpose and are presented with dates and coconuts or silver coins.

Usually seven days previous to the marriage *kankotris* (marriage invitations) written or printed are dispatched to friends and relatives, and two or three days after at both the houses the *maṇḍvo muhūrta* (installation of the booth), and the installation and worship of Ganapati and the *Gotraj* (family deity) takes place

Mandvo Muhurta.

The *mandvo muhurta* ceremony is observed at both the places among all communities but castes like *vanias* and *rajputs* give it a great importance. As the marriage ceremony is held at the bride's the booth there is specially decorated. Early in the morning several women meet and taking a lamp pass singing to a refuge heap near the place for the *mandvo*. They

dig a small hole close to the heap, drop a pice and a betelnut into the hole, and worship them with *kunku*, rice and flowers. They fill the hole and bury a nail in it. This ceremony known as *ukardi notarvi* (dung-hill asking) is meant to placate evil spirits. Five males belonging to the family take part in the *manḍvo muhurta*. A hole is dug either on the right side of the main door of the house or in a place specially chosen by the astrologer. In front of this hole the parents of the bride and the bridegroom, as the case may be, are seated on *pātlās* facing east, their foreheads are marked with *kaṅku* and the ends of their garments are knotted together by the family priest. They throw in the hole a few drops of water mixed with *kaṅku*, curds and milk, a betelnut and a copper coin. Their garments are then untied, and while music is played and women neighbours and friends sing songs, a *khijaḍā* (prosopis spicigara) log dressed by a carpenter and known as *mānek- stambh* (ruby-pillar) is set up in the hole. This inaugurates the erecting of the booth.

The same day *maṇḍvo muhūrta* is performed a party of male and female relations go with music to the potter's to worship his wheel and bring earthen vessels required for the wedding. They throw rice and turmeric powder over the wheel, present the potter coconut, rice and molasses and return with the vessels in a procession singing *phatanas* (jest-songs). The *maṇḍvo muhūrta* is followed by the installation and worship of Ganapati and *gotraj* (family deity) and a number of propitiatory rites such as *Punyahavacan*, *Mātṛkāpūjana*, *Nāndiśraddha* and *Grahamakha*.

The image of Ganapati and his two consorts, Riddhi and Siddhi, is painted in many colours or drawn in an outline of *sindur* (red lead) on a wall in a room and worshipped. In many castes it is the right of the daughters of the family to worship the god and receive presents in return.

In the morning the head of the house bathes, performs *sandhyā*, and worships Ganapati. He next worships the *varso-dhāras*. These are seven legendary streams Sri, Laksmi, Driti, Medha, Pragnya, Svaha, and Sarasvati represented by seven *kaṅku* marks on the wall. Molasses, rice, *sami* (prosopis spici-gara) leaves are stuck over the seven spots and along with the *varsodhāras* are installed the *matrkas* (Mothers). They are set up in the form of sixteen small heaps of rice placed on a piece of cloth spread over a *pātlā* (wooden stool) set in front of two big earthen vessels, each with a small earthen pot in its mouth, and in the small pots a coconut and mango leaves. Over these vessels are hung two baskets with wheat seedlings grown in them. The wheat sprouts called *rannyadev* or *rannāde*

Punyahavacana and other ceremonies

are worshipped by all the castes, and are called the *gotraj*[1] by some. The worshipper in token that the *varsodhāras* and *matrkas* are set up as gods, throws rice on them. He sets a coconut in front of each of them in the hope that they may fulfil his desires. He then begins the *vriddhi* (increase) or the *abhyadhika sraddha*. Five small bundles formed by twisting and tying the roots and the tips of *kusa* grass are laid on a *pātlā* facing the worshipper. Water from a copper dish in which have been dropped a blade of *darbha*,[2] redpowder and grains of barley and sesame is sprinkled over the bundles. The performer knots the end of his waistcloth, sprinkles over his head water from the dish with a blade of *darbha* or *kuśa* grass and pours water on his hand in token of his *sānkalpa* (promise) to perform the worship of the *Visvadevas* and the ancestors. Having duly performed the worship under the guidance of the priest the worshipper sweeps the ground in front of him and taking into his hands water and three blades of *kuśa* grass marked with redpowder pours the contents in three lines from east to west. As food for the ancestral spirits nine balls of cooked rice and *kansār* (wheat flour mixed with sugar and clarified butter) are laid on three blades of *kuśa* grass in three parallel lines. Over each of the three lines of balls is laid a piece of white cloth or in its absence three threads. The *pindas* (balls) are then worshipped with sandle-powder and flowers. When the worship is over the worshipper salutes the *pindas*, offers *daksinā* to the Brahmans and receives their blessing. He then throws rice over the balls, removes the blades of underlying *kuśa* grass, and smells the *pindas*. This offering to the fathers differs from other funeral ceremonies in the detail that the worshipper does not wear the sacred thread on his right shoulder.

In the afternoon of the *vriddhi srāddha* and *matrka* installing is generally performed *grha śānti* (planet-soothing), an intricate rite meant to propitiate the planets and make them favourable.

It is a general custom in Gujarat State that just before the marriage ceremony or on the day before it, the bride's maternal uncle and his wife bring presents for the bride and her parents. These presents are known as the *mosālū* a present from *mosāl* the maternal uncle's house, and are brought in a procession with music and women singing songs. In the procession the presents are displayed on large open baskets carried by two women. The bride's presents consist of her wedding dress or ornaments especially *cudo* (bangles) to be worn at the time of the wedding

1. This is a feminine deity and may be worshipped for eight days to ward off evils. After the marriage the married couple worships the deity and then the baskets are thrown into a well.

2 The *darbha* (Poa cynosuroides) also called *kusa* is held in such peculiar veneration by Hindus that every law-book and almost every poem in Sanskrit contains frequent allusions to the holiness of the plant.

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ceremony. The bangles are made of ivory and dyed red, a strip of gold covering the whole circle except the two raised edges. Usually three *cudo* are worn on each wrist together with two broad blue glass bangles called *kankan* which are also brought along with these presents. These ivory *cudo* which formerly used to be nearly two inches broad, are, as modern fashion dictates, hardly one tenth of an inch wide. The bride's parents also receive presents of rich items of dress. In some castes the bridegroom is presented with *mosālū* consisting of cash and rich dress. Even among castes where there is no such custom, the bridegroom's wedding dress is invariably presented by the maternal uncle.

The Jān.

After the *grahaśānti* (planet-soothing) is over if the bride belongs to another village the *jān* (procession of carriages) starts to go there. The bridegroom having bathed and put on the clothes received from his maternal uncle mounts a horse holding in his joined hands a coconut, betel leaf, some rice and a rupee.

The procession starts, with drummers and pipers in the van followed by the male relations and the bridegroom generally on his horse and the women singing. The further journey to the bride's village is completed by any convenient method of transport, and on their arrival at the village the parents and the male relations of the bride go to receive them. The girl's father embraces the boy's father, salutes him and escorts the procession to some house in the village which has been specially engaged for their use. When the bride and bridegroom belong to the same village such processions are not necessary.

On reaching the bride's village the newly arrived guests dine with the girl's father, return to their lodgings and again visit the girl's house taking on a large copper plate silver ornaments, silk clothes, and other presents (brow-spangles). The bride sits on a *pātlo* (wooden-stool) set for her within a square traced with rice and the bridegroom's father washes her right foot with milk and water, sprinkles *aksta* (grains of rice) over it, marks the backs of her hands with *kanku*, gives her a rupee and puts the ornaments and other presents in her lap. The girl retires into the house and the bridegroom's party return to their quarters.

The bridegroom now gets ready to start for the marriage hall.

Before the bridegroom's wedding procession starts women of the bride's party go to the bridegroom's house with *kalvo*, *i. e.*, a food offering consisting of some sweet wheat-cakes, sugar, *ghee*, etc. These are served to the bridegroom on a

thaḷi (dining plate) and his hands washed with sugar and water. A present is made to the lady who serves the *kalvo* and washes the brass dish, the dish is filled with dried dates and the bride's relations go home. Among the Vadnagar Nagars the *kalvo* consists of milk and the bride's sister carries it in a small brass pot.

Among Brahmins there is a custom of performing *vāgdan* (plighting the troth) on the day before marriage, at which a solemn declaration is made as at the time of the betrothal that the daughter of so and so is betrothed to the son of so and so. This ceremony is supposed to confirm the betrothal which now cannot be broken for any reason whatsoever.

The bridegroom's wedding procession is a grand affair among all castes. The procession starts, first the drummers and pipers, then the male relations then the bridegroom riding on a richly caparisoned horse or in a carriage or car, with a canopy over his head. He may be dressed in an old fashioned coat known as *jama* made of dazzling golden cloth and a turban of similar cloth, or an ordinary long coat of rich cloth and a turban often in the Rajput fashion. The mother of the bridegroom puts on her head a *mod* (decorated head dress) and carries in her hand a *rāmaṇ divo* or *olāmaṇ divo*, a lamp of peculiar shape. Among Nagars the bridegroom's father's sister carries the lamp, and his mother keeps in her hand a brass pot filled with milk which she pours on the hoof of the bridegroom's horse as he moves on in the procession.

At the bride's the bridegroom dismounts and is made to stand on a *pā talā* at the entrance of the marriage booth. The bride's mother with the priest and several women accompanied by the husband of one of the bride's sisters go to where the bridegroom stands. The bride's mother puts on a *mod* (coronet) and then waves a miniature plough, a grinding pestle, a churning stick, and an arrow four times over the heads of both the bridegroom and the bride's sister's husband and throws pieces of *juvar* (sorghum vulgare) stalks in all direction. She piles at the bridegroom's feet a *saṁpuṭ* (*kodyun*-box) made with two earthen cups painted white with *chuna* and tied together with a red string so that their edges touch each other. She makes a *cāṇḍlo* on the bridegroom's forehead and squeezes his nose. The bridegroom treads the *samput* and breaks it and entering the booth takes his seat on a *pātlā* set in the *māyarū*, a specially decorated place erected in the *māṇḍvo*.

The marriage service now begins.

The rites and ceremonies (*vidhi*) to be performed at the *vivaha* (wedding) vary in their observation according to caste

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and region. However, the rites commonly accepted by all the Brahmanic Hindu communities are *kanyā dana*, *vivāha homa*, *pāni-grahaṇa*. *āgni-pariṇayana*, *aśmārohaṇa*, *lāja-homa*, and *saptapadi*, each succeeding in the order given here. These are interpolated by a number of minor ceremonies such as: feet-washing, honey-sipping, rice-throwing, moment-naming, present-making, clothes-worship, oath-taking and feeding.

Kanyādana.

The bridegroom sitting in the *mayara* is formally received by the bride's parents. His feet are washed and he is honoured with *madhuparka* (mixture of honey, butter, curds and sugar). Then the bride clad in her marriage robe and decked with jewels is led by her maternal uncle to a *pāṭlo* facing the bridegroom and a cloth is drawn between the marrying couple. The priest puts the bride's right hand in the bridegroom's right hand and places a blade of *darbha* grass (eragrostis cynosuroides) between their hands. Until the lucky moment arrives the priests chant verses, and relations and others clustering round the bride and bridegroom, at the end of each verse, keep on silently throwing a few grains of rice over the two. At the lucky moment the priests cease chanting and the cloth is drawn towards the north, a brass plate is beaten with a stick and at the signal the musicians raise a blast of music The priest repeats the names of the bride and the bridegroom, and the names of their fathers, great grand fathers and families and (among Brahmins) the names of their *pravara* and *gotra* (stock branch) and *veda*. Repeating these particulars along with the priest, the bride's father solemnly declares that to achieve happy results he gives his healthy daughter to the bridegroom, and that she is no more his, and then the father pulls out the blade of grass from between the couple's joined hands and the marriage is declared solemnized. Great importance is attached to this pulling of the blade of grass at the particularly propitious moment, as this completes the *hasta-malap* (joining of hands) of the bride and bridegroom.

The guests now depart receiving present of betel leaves and coconuts. While the women of the brides family sing marriage songs, the bride and bridegroom receive presents from their friends and relations. each present being duly noted in writing by one person belonging to the bride's and by another belonging to the bridegroom's family.

After receiving the presents the bride and bridegroom go to a chamber called *koutukaghar* in the ancient books, or known as *kobun* in some castes. They are accompanied by the priest and some ladies only. There the bride's face which may have been veiled uptil now is uncovered and her eyes if closed in shyness as may be the custom in some castes, are now opened. The bridegroom then offers the wedding robe called *cundadi* to the bride who puts it on and ties one end of it to the other end of the bridegroom's robe. Or, a piece of cloth known as *chedābandhana* is provided, and one end of it is tied to the bride's garment and the other to the bridegroom's. Among

the Vadnagar Nagars the ends of this cloth are not tied but kept in their right hands by the couple who must not move about without this till the marriage sacrifice is over. The bridegroom then adorns the eyes of the bride with black pigment, combs her hair, gives in her hand mirror to look into, and throws round her neck a garland.

Among Nagars, while the bride and bridegroom are sitting in this room (*kautukghar*), a bridal coronet called *mod* is placed on the bride's head. To this head-dress sometimes is pinned up a *ghatadi*, a piece of valuable silk-cloth brocaded with silver and gold, which, after covering the head, keeps hanging on the back. Among many other communities the bride puts on the *mod* at the time of her departure for her new home.

While garlanding the bride, the bridegroom recites a verse meaning "may the herbs be sweet for us ; may the heaven's water and sky be sweet for us ; may the lord of the field be sweet (kind) for us ; and may we follow them without suffering any harm". Both of them then tie round each others wrist a red string in which hangs a dry fruit called *mindhal* (randia damentorum) and an iron ring called *challo*.

Vivaha-homa.

When the couple returns from the *kautukaghar* the *vivaha homa* (marriage sacrifice) begins. For that purpose, just near the *māyarū* where the *kanyādāna* took place, a small square booth called *cōri* is made. At each of the four corners of the *cōri* bamboo poles are erected and in the space between these poles at each corner seven empty water posts are piled, one over the other, the biggest at the bottom and the smallest at the top. Among some castes the pots are brass ones and among others they are earthen ones. The pots are painted white with wet *chuna* and five red marks are made over them with *kanku*. Festoons of the leaves of *asoka*, popularly called *Āsopālav*, are tied on all the four sides. Facing the east the bride and bridegroom sit on one long *pātāla* (wooden seat) which must have no nails to it, the bride sitting on the bridegroom's right. The priest constructs an earthen altar in the *cōri*,, establishes a sacred fire on the alter and makes some prescribed offering of *ghee* in the fire. The bridegroom then takes the bride's open right hand into his own right hand, saying 'Oh wife, I hold thy hand that till our old age we both may live together.' The priest sets on the north-east corner of the *cōri* an earthen waterpot full of water into which coins have been dropped and its mouth closed by mango leaves. The bridegroom makes the bride rise and with his left hand hold her right toe on a stone set to north of the fire repeating the sacred verse which enjoins the bride to be firm as the stone. He takes a round of the sacrificial fire and the stone, the bride following him closely. When the round is finished, the bridegroom holds the bride's palm over his own and in the bride's palm the bride's brother or a person acting in her brother's place drops some *ghee* and

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fried grain and the bride lets them fall as an offering into the fire. The circuit making and offering of fried grain are repeated four times. To the north-east of the fire seven small heaps of rice are piled and the bride levels them one by one with her right toe. These are the seven steps which when once taken the marriage cannot be annulled. Water from the pot set to north-east is then sprinkled over the heads both of the bride and bridegroom. Afterwards the bridegroom lays his right hand to the bride's right shoulder, the priest repeating on his behalf the verse meaning "Oh bride, give your heart to my work, make your mind agreeable to mine. May the god *brihaspati* make you pleasing to me." The bride and bridegroom are then taken out and shown the polar star. Fresh offerings are made to the fire and the bride and bridegroom bow low before the family gods, the priest, and the elders including the father-in-law and the mother-in-law.

Among Brahmans there is the custom of performing the *carubhaksana* or *carubhaksa* (cooked-food-eating) ceremony at the bride's house usually on the fourth and sometimes on the next or third day after marriage. The Vadnagara Nagars call it *cotho dahado*, *i. e.*, the fourth day. The couple sit in the booth called *cōri* and the priest lighting a fire performs a sacrifice. After this the couple feed each other with *kansar* as on the wedding day. The bridegroom's people are then presented with cash and clothes by the bride's people. These presents are given even among castes which do not perform *carubhaksana*. The bridegroom is also presented with a rich dress, a couch, silk bed and big copper vessels. The classes which put a price on the bridegroom have to pay very heavy *peharāmanī* as these gifts are called, at this ceremony.

Ubetar.

Generally the *ubetar* (leave-taking) ceremony follows when the nuptials are over. The members of the bridegroom's party receive gifts of honour from the bride's father and *vice versa* as has been settled in the marriage negotiations. The customs of *dadhi pīlavavi* in which the father-in-law stroke each other's beard and present each other a turban, and that of *thapā marvā* in which the bridal pair impress on the doors marks of their open hand with *kanku* are now-a-days rarely followed.

The time now comes for the bride to leave her father's home. The parting is sad and tears are shed by the bride and her mother. A car waits at the door. Worship is offered to the car-wheels and while songs befitting the occasion are being sung the couple takes leave.

In olden times when child-marriage was prevalent the bride did not accompany the *jan* procession in the return trip. This is not the case now.

On returning home the bridal couple is received ceremonially at the house steps. They then proceed to enter the house. The

bridegroom's younger sister stops them at the door and on a promise of a gift lets them in. They then together offer worship to the *matrkas*, *gotraj*, *rannadeo* or any other nuptial deities that were installed at the inception, and formally dismiss them. Ladies sing special songs at the time. The bride and bridegroom then untie the *mindhal* bracelet from each other's wrist, unfasten the ends of their robes which had been knotted together, feed each other with *kansar*, play with *kodis* (shell money) and lash each other with a *kordā* (twisted cloth). The booth is then dismantled, the *māṇek stambh* is pulled out and the *ukardi* (dung-hill) deity is dislodged. With a *vadhāmanā* (thanks-giving) ceremony performed at the temple of the village-god where all go in a procession the marriage ceremony comes to a close.

Anu.

According to the prevailing custom in some communities a religious ceremony may be held to initiate the wedded couple to a married life. Among Brahmins this ceremony known as *cothudana* now-a-days forms part of the marriage ceremony itself. Among a number of other communities the bride returns to her father's house after a stay of a fortnight at the husband's on an *āṇu* (invitation) sent by her father along with her younger brother. When she returns to her husband's after some days her father furnishes her with clothes, ornaments, sweets and a number of articles of household utility and a feast is held at the husband's. The time got between the succeeding *āṇus* goes on increasing and the final *āṇu* known as *jiāṇu* is sent when the daughter goes to her father for her first delivery. It may be a custom among some communities for the father to send some presents every year to his daughter after the *jiāṇu*.

Widow-marriage.

Though law sanctions widow marriage, orthodox people, particularly among the so called higher castes, do not look at it with social approval. They are however not uncommon among craftsmen communities and are freely allowed among harijans and aboriginal tribes.

As Hindu-*Sastras* do not accept widow-marriage as a *saṁskara* there is no ritualistic ceremony for it. Those who perform it are led by the custom of the caste.

Divorce

Divorce is socially sanctioned generally among communities who admit widow-marriage.

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A short time before death, according to his means, a Hindu gives a Brahman, the *gaudān*, that is, the gift of a cow or its worth, an amount which must not be less than one rupee and four annas. *Viṣṇupujā* (Viṣṇu- worship) may be performed and money, clothes, grain, distributed to Brāhman priests. On the near approach of death the dying personl is aid on his back with his feet to the south on the portion of the floor which has been smeared with fresh cowdung, and some drops of Ganga water alongwith *tulsi* leaves are poured into his mouth. Close by is set a lighted lamp fed with ghee, a Brahman

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priest reads the *Bhagvat Gita* to the dying person, and the relations sit near and repeat *Rām Rām*. When life is gone the body is covered with a sheet, and the relations raise a loud cry. The news of the death spreads and caste people come for the funeral. Friend and relations sit outside in the veranda weeping. The women stand in a circle near the door, cover their faces with their robes and lament.

The bier

While the women are wailing, two or three men fetch from the market two bamboo poles, coir ropes and pieces of bamboo, and if the deceased is a married woman a silk robe and a red thread called *nāḍā*. The pieces of bamboo are fastened to the poles by coir ropes at short distances. The bier is then washed with water and is taken inside the house. The body, bathed and clothed in a waistcloth if a man and in a silk robe if a woman, is laid on the bier and tied to it by the coir strings. It is then shrouded with a silken robe in the case of an unwidowed woman, or with a shawl or other costly cloth in the case of a rich man, and with a white linen sheet in other cases. The bier-bearers bathe and dress in silk or in wet-waistcloths.

The bier is raised on the shoulders of four of the nearest relations and is borne forth feet first, the chief mourner going a little in front carrying, slung in a string, an earthern jar holding lighted cowdung cakes. On the way the bearers chant together, " *Rām bolo bhai Rām* -say Rama, brother, say Rama". The widow of the deceased and other women of the family follow the party for some distance and then return to the house wailing, and bathe either in a well water or in a river.

Cremation

About halfway to the burning-ground the bier is turned round and set on the ground, and rice, betelnuts and copper coins are laid on the spot where the bier was rested. From this spot to the burning ground the bearers of the corpse reverse its position and henceforth carry it head foremost. When the burning ground is reached which is usually on the banks of a river the bier is laid on the ground. A pile of wood and cowdung cakes is prepared and the body is laid on the pile with its head to the north. The religious part of the ceremony is then performed by the son or other nearest of the kin and in the case of a married woman by her husband. He offers to the dead balls of rice flour, the priest reciting the proper *mantra*. Leaves of sacred basil, pieces of sandal wood, *gugal* (incense) and coconuts are dropped on the body and the pyre is completed. The priest starts chanting sacred verses and the chief mourner takes a lighted cowdung cake from the earthern jar, dips it in clarified butter and repeating *mantras* places it on the mouth of the corpse. He then moves five times

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round the pyre with a burning brand in his hand and lights it at the head. The pyre is then kindled and is left to the care of a few of the more experienced of the party. The rest of the mourners go to a distance and sit talking until the body is consumed. They then return and pour *ghee* on the fire to complete the burning. When the fire is burnt out water is poured over it and the embers extinguished. They gather the ashes and throw them into the river or if no stream is near, drop them into a pit dug for the purpose and sprinkled with water. A ball of rice flour is laid on the spot where the body was burnt. The chief mourner who kindled the pyre chooses from the extinguished embers two small pieces of bone and carries them with him with the object of throwing them with suitable ceremonies into a sacred river such as the Ganga or Narmada. In some cases these pieces of bone are laid on the spot where the head of the body rested. The chief mourner fills with water the earthen pot in which the fire was carried and throws it backwards over his head. When this last rite is over the whole party leaves the burning ground lamenting but never looking back. On their way home at a river or pond the son and other relations offer the deceased sesame and water, and then all bathe, wash their clothes, return to the house of mourning and then go back to their homes. On that day no food is prepared in the house of the dead. The inmates are fed with food prepared at the house of the father of the chief mourner's wife or at the house of some near relations or neighbours.

Mourning.

At the house of mourning for ten days female relations and friends come morning and evening. At this time milk and water are set on the *tollā* (wooden pag) on the first day by a Brahman and on succeeding three days by some members of the household. Letters called *cithis* bearing the sad news are sent to relations and friends who do not live in the same village or town, stating the time of death and the time when the death rites are to be performed.

The period of mourning varies from less than a month to a year according to the age of the deceased and the nearness of the relationship. During the first twelve days of mourning members of the same family stock are held to be impure and their touch to cause defilement. Of them those adult males who are younger than the deceased are expected to have their heads and moustaches shaved on the tenth day after a death.

Obsequies.

The obsequies or the post-funeral rites generally start from the third day after death. The chief mourner on that day with relations and friends goes to the burning ground, pours milk over the cold embers; gathers the ashes and except a few bones which are preserved to be sent to some holy place or river, such as Benaras, Gaya or Sidhpur, removes them to some neighbouring

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tank or river and in the place of the ashes he lays an offerring of a wheat-flour ball.*

Memorial rites or *Srāddhas* are performed on the tenth, eleventh, twelfth and thirteenth days after a death. On each of the ten days the chief mourner offers a rice ball or he offers ten riceballs all at once on the tenth day. The leading rite on the eleventh day is marrying a steer to a heifer. The performer of the rites bathes and to become pure makes *prāyascitta* (atonement). Then follows the eleventh day *śrāddhas* in which a ball of cooked rice is offered to the dead. On the twelfth day the sixteen monthly *śrāddha* are performed together and after them the *sapindikarana* or ancestral *sraddha* by which the dead joins the *pitrs* (forefathers). With the thirteenth day *śrāddha* at which various utility articles designed for the use of the departed soul are presented to the family priest, the funeral rites come to an end. During the first year, *masiso* (monthly), *chhamasi* (half-yearly) and *varsi* (yearly) *śrāddhas* are performed. A separate mind-rite is performed on one of the fifteen days assigned for *śrāddha* in the month of Bhadrapada. On all these occasions as part of the rites caste dinners are given.

It may be noted that many of the elaborate funerd rites described above are nowadays not very strictly observed. Some of them are often dropped altogether; others observed in a considerably abridged form. All the superstitious activities connected with death, funeral and the obsequial rites that involve expenditure of time and money are now on the wane and no more strictly observed.

RELIGIOUS BELIEFS

Element worship.

According to the Hindus, the universe is formed of five elements or *pañchamahābhūtāni*, (literally, five great beings). These five elements are : *prithvi* (earth,) *āp* (water,) *tejas* (light), *vayu* (wind), and *ākāś* (ether). All objects are believed to be composed of one or more of these elements, and when an object is destroyed each of its component parts returns to its own element. Each of the five elements is presided over by deities, earth by *kṣiti*, water by *varuṇa* and *indra*, light by *agni*, wind by *vāyu* or *marut*, and ether by *indra*. Four of these elements, viz., earth, water, fire and wind, are in one form or other, worshipped by almost all classes of Hindus.

Earth.

Earth as one of the five elements of the universe is held in high reverence by all castes. As the nourisher of life, she is looked upon as a mother. She is the embodiment of forbearance and long suffering, pure and holy, yet allows both the pure and the impure, the just and the unjust to dwell on her. It was to lighten her burden of evil that Visnu underwent his nine incarnations. When the weight of the accumulated

* In the case of Brahmins, Brahma-kshatris and Rajputs a Brahmin priest is in attendance for administering proper *mantras* at all the death rites.

sins of the wicked is too much for her, the earth quakes. An earthquake therefore is a sign of widespread sin and wickedness. The material body is regarded as *maṭṭī*, a lump of earth, destined to be united with earth of which it forms a part.

On rising from bed, before setting their feet on the ground, religious minded Hindus say a prayer of forgiveness to earth. Before the foundation stone of a house or temple is laid, as also at the time of erecting a booth for a marriage or a thread-girding ceremony, the earth is sprinkled with water and flowers are strewen over it. Husbandmen worship the earth on the bright third of *vaiśākh* by sprinkling their fields with water and by strewing them with flowers. The earth is also regarded as king's consort.

Water.

Water (*āp*) the second of the five elements is of two kinds, earth-water and sky-water ; *Varuṇa* presides over earth-water and *indra* over sky-water.

Water though pure in itself can be defiled. Running water is never, but standing water is always defiled by the touch and use of the unclean. Besides for drinking and washing, water is used for various religious purposes. It removes outward impurity, and the water of sacred pool or stream cleanses people from sin. The pouring of a handful of water is needed to complete religious gifts.

The gift of water is considered the noblest of gifts, and digging of ponds and reservoirs and sinking of wells meritorious acts. On main roads where there is no drinking water pious Hindus make paid arrangements to supply drinking water to travellers.

Varuṇa (water-god) is supposed to have five abodes : the sea, the river, the reservoir or pond, the spring and the well. On every no-moon day, particulary when the no-moon falls on a Monday, a sea bath is supposed to cleanse one of all sins. On the first day of *Caitra* and on the *Śrāvaṇa* full-moon day traders worship the sea by throwing flowers and a coconut into it. A river is specially sacred on Sundays and Tuesdays, on fast days, on the twelfths and dark fifteenths of every Hindu month, and during the whole of the intercalary month. A river-bath on these days is believed to have great sin-cleansing power. Of Gujarat rivers Tāpi, Narmada, or Reva, and Sarasvati are held particularly sacred. The meeting place of two or more rivers is specially sacred. The waters of Ganga Jamuna are stored by many *Vaiṣṇavas* who sip the water of the Jāmuna after the daily worship is over. The water of the Ganga is used by Hindus on sin-cleansing occasions. Ponds near a scared shrine are held sacred and on fast days people bathe in them. The sudden appearance of a spring

anywhere is regarded as an out-flow of the water of the Ganga and a bath in it is held to be as cleansing as a bath in the Ganga. The chief hot spring that is held sacred in Gujarat is at Unai, forty miles south-east of Surat, where thousands of pilgrims gather from the neighbourhood on *caitra* full-moon day. Before sinking a well certain ceremonies are performed. The digging begins after a worship of the water deity and on the appearance of a water in the pit, a stone daubed with redlead is laid near the top as the home of the deity. It is unlucky to drink water out of well before it is worshipped. A month after childbirth the mother worships the house-well, draws water from it and uses it for some family purpose.

Rain.

Indra is supposed to rule the firmament, regulate the motions of the clouds, wield the thunder and control rain. If rain holds off till late in June, or standing crops wither for want of rain in July and August, efforts are made to induce Indra, the rain-god, to favour earth with showers. Brahmins are engaged to repeat prayers to Indra in Shiva or Mata temple. Sometimes, the outlet by which the water poured over the *ling* of Mahadev drains is closed, and Brahmins or women keep pouring water on the *ling* till it is deep sunk in water. This pouring of water, intended to please Mahadev, may be continued for a week unless rain falls in the meantime. Sometimes the people of the town or village quit the place in a body for a day and leave it *ujad* (waste), and cook their food outside. The sight of how the place would look like if rain is withheld is believed to rouse pity in the rain-god. Sometimes a party of Bhil, Koli, or Kanbi women walk in the streets singing the praise of *mehulo*, the rain-god as they call him, one of the party bearing on her head a clay frog with three twigs of *nim* tree stuck in it, and stopping at every household for doles of grain, and for water being poured on the clay-frog.

Fire.

Of the five elements *agni* (fire) is held the most sacred by almost all classes and its worship is widespread. Brahmans hold fire in high veneration, calling it *vishvadev* (universal lord) and daily offer oblations of cooked rice to it. Besides in cremating the dead, fire is used also in all sin-cleansing rites. To complete thread, marriage, and pregnancy ceremonies offerings are made to fire. Anything that has become unclean is purified by throwing it in fire. Sitā, the wife of Rāmā after her deliverance from Ravana, is believed to have been purified by *agni-praveś* (entry into fire). Fire is one of the great spirit-scarers in all cases of spirit possession and live charcoal or a lighted lamp is used in many cases of witchcraft to drive away the attacking spirit. The *dipāvali* and the *holi* festivals are occasions held sacred to fire and lamp worship.

Wind.

The vital spirit of a human being (*prana*) is believed to be a phase of *Vāyu*, the wind-god. Brahmans in their daily worship practise *prāṇāyām* (regulation of breath by alternate

closing of the left and right nostril with the four fingers and thumb of the right hand). At their meals before touching any other food Brahmans eat as offerings to their *pañcaprāṇa* (five modes of vital air) five morsels calling the 'vital airs' in the order as *prāṇa, vyāna, apāna, samāna,* and *udāna.*

RELIGION. Hinduism.

Hinduism as it is expressed through the religious practices of the people shows various phases of religious thought. "Hinduism of to-day is not the vedic religion nor is it the philosophical pantheism of the highly educated Brahman. It is a vast mixture, in which the *vedic* worship of the great forces of nature, the *p urānic avatārs,* the philosophical dectrine of *karma.* and be it noted the pre-Aryan reverence for trees, stones, animals and tribal *totems* are inextricably intermingled."[1]

In Hinduism we have, at the top of the ladder, Brahmanism represented by a few known as *vedantists,* whose leading dogma, *ekam eva advitiyam,* 'There is but one being without a second' summarises their whole creed. According to them nothing really exists but the one universal spirit called *brahma* or *Parmātmā* and whatever appears to exist separately from the spirit is a mere illusion;*jivātmā* or the individual soul is identical with *Parmātmā* or the supreme soul, as microcosm with macrocosm; it is restrained from consciousness of its unity, and hence from union with it by the resultants of its previous *karma* or actions. So long as there remains attached to the soul a resultant of its previous actions, it is doomed to wander in repeated incarnations from body to body. Only those souls in which the resultant finally vanishes attain *moksa,* or emancipation. They lose all sense of individual personality by complete absorption (*sāyujyu*) into the only really existing Being who is wholly unfettered by action and without qualities of any kind (*nirguṇa*), and is called *satchindānanda* because he is pure life, pure thought, pure joy.

Religious beliefs and practices.

The religious life of orthodox Hindus is mainly governed by the tradition of the caste-group to which one belongs, though even in their case the influence of caste tradition is tending to diminish appreciably with the spread of modern education. The whole of their religion may be said to be centred in caste observances. Provided that a Hindu observes the rules of his caste he is at liberty to hold any religious opinion he pleases. The Brāhmans except a few who belong to the Swāminārayan sect are followers of Siva, and almost all have household gods whose worship some member of the family must perform. The family gods are some or all of the Hindu *panchāyatan* or the group of five, composed of a stone *ling* for Mahādev, a stone *shāligrāma* or a picture of Shri Nathji for Visnu, a picture or metal image of sakti, bhavani or Mata, typifying divine energy, *Gaṇpati,* and *Surya* or the Sun, or *Hanuman,* the Monkey-god. Their social and religious customs are chiefly ruled by the *mayukha,* the *itmāksara* and the *dhanma* and *nirnaya sindhu.*

1. L. J. Bedgwick: Census of India, Vol. VIII, pt. I.' P. 63.

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They are expected to perform *sandhya* (twilight prayer) at least once a day in the morning, count their beads and repeat the *gayatri* or sun-hymn. On Mondays, on the first and fifteenth of each month, and on the great religious festivals, many persons visit *Siva's* temple for worship. Women are more careful than men in observing fasts. The priests learn by heart the ritual required at the different everyday ceremonies, but with a few exceptions have no claim to learning. The brahmaksatris keep rules laid down for Brāhmans for reading the sacred books, worshipping, meditating, repeating prayers, making offerings to the Sun and at meals putting on a silk sacred cloth. The Kāyasthas belong to the Vallabhāchāri sect, but some of them are Rāmānuji and others Shaiva. The Vanias are very devout and as a class are staunch adherents of the Vallabhāchāri sect to which they were converted about four hundreds years ago. Each house has a separate room devoted to the god. They worship daily at the Vallabhāchāri temples and in their houses. Instead of the sacred thread, both men and women wear round their necks a *kaṇṭhi* (basil thread necklace). They mark their brows with two upright lines of *kaṇku* (red powder), rub their eyelids and fore-heads with *gopi-chandan*, the yellow clay found near Dwārkā, Gokul and Mathura, and imprint a seal dipped in sandal dust between the sectarian lines and on the temples, neck, and arms, The Bhatias are Vaiṣṇav of the *vallabhāchāri* sect and are observent of religious rites. Like the Vānias, they visit vaiṣṇav temples and worship in their houses the image of Viṣṇu in the form of Ranchhodji and Rādha-Kriṣṇa. The Luhāṇās are Vaisnavas of the Vallabhāchāri and Rāmānuji sects. Their family goddess is *randel mātā* and they are devout worhippers of Dārya Pir, the spirit of the Indus. The Rajputs do not differ from other Hind their religious observances and practices. Though many are followers of the Vallabhāchāri, Swaminārāyan, and Rāmānuji sects, Rajputs from remote ages have been partial to the worship of Śiva At the same time, they worship all Hindu gods and goddesses and the shrines in their houses contain images of Śiva, Viṣṇu Gaṇapati and of the tutelary goddess of the clan. Among other castes, such as kanbis kolis, kachhias and the agricultural and artizan castes generally, a striking feature is the great hold which comparatively modern cults called *mārga* or *panth* have taken upon them. Of these the chief are Rāmānandi, Swāminārāyan, Kabirpanthi, Bijmargi, Pranami or Meheraj-panthi, Ramsanehi, Dadupanthi, Radha Vallabhai, Santaram-panthi, and Shakta or Vāmmārgı. Sometime between the ages of seven and eleven both boys and girls are taken to the religious head or *guru*, who binds round the neck of the no-vice a rosary of beads made from the steam of the basil plant. Besides his food for that day, the *guru* receives a small sum of money as initiation fee. Sickness is a visitation and is, there-fore, an occasion for the taking of vows such as to feed a certain number of Brahmans, not to drink milk nor to eat *ghee* or any other dainty, and to go bare-headed until the patient has been on a pilgrimage to the shrine of his patron deity. Harijans are very religious and honour most of the gods, but chiefly Hanuman,

Ganapati, Rama, and Devi; above all, they revere the sacred basil or *tulsi* plant. In some hut near their dwellings is installed an image of Hanuman or of Meheldi Mata before which, on holy days, a lamp is lit, and flowers are strewn. Those who can afford it are fond of going on pilgrimage to Dakore and the Mātā at Pavagadh and Aṁbāji. A belief in demons, sorcerers, witches, the evil eye and in omens is found more or less in almost all people. The worship of ancestors, the elements, planets, the sea, rivers, animals, and plants, is common.

Deva-puja.

Images of various kinds are held sacred and worshipped by almost all classes of Hindus. These are made of stones which may be polished and cut into various forms, or only unhewn blocks with or without shape. The forms under which Śiva, Mātā, Ganapati, Hanuman, Visnu and numerous other gods and goddesses are worshipped, or rather the forms in which these and other deities are believed to dwell, are human figures generally grotesque, made out of various materials.* Where these images are made of stone they are either cut into shape from marble, limestone, sandstone, and crystal by local masons or are brought ready-made from other parts of India. Among stones the *saligrāma* stone (a black stone containing fossil ammonite found in the Gandaki river near a village called Salagrma) and the stone from Dvārakā marked with *cakra* (discus) are highly prized in the woship of Viṣṇu. The bana stone which represents Siva is brought rom the banks of the Narmada at the *tavra* festival, when as the saying goes, there are in the Narmada waters 'as many sankaras as there are *kankaras* (stones)'. The image before it becomes an object of regular worship and undergoes elaborate ceremonies known as *devta pratistha* (consecration of an image). Then only the image becomes a dwelling of the guardian spirit known as a god or a goddess. Such an image is set in a temple or in a niche or room of the house and is worshipped daily or on important days.

The socially and educationally backward classes have no elaborate rites for making an image or stone fit to be the house of a guardian. With them any stone or crude image rubbed with redlead is an object of reverence. Such objects worshipped by these classes may be brought under two heads, (1) dwellings of gods and goddesses and (2) dwellings of the dead.

A rough or a polished stone daubed with redlead is the dwelling of Govaldev, Hanumān, Kahnandev, Kākobālia *Simārio* or Samradev and a stone marked with a redlead cross or a heap of stones is the dwelling of the godesses Meladi, Sikotar, Khodiyar, Devali or Bhavani. A cross or sometimes a redlead trident is painted on the trunk of a *nim* or a *pipal* tree, and a heap of stones is piled at its root. For fear of offending

*The Bhagvata-purana (XI, 27-12) says images are eightfold *viz*. made of stone, wood, iron, sandal-wood or similar pasts, drawn (as a picture), made of sand, of precious stone and lastly metal.

the spirit or the goddess, passers, especially women, add a stone or two to the heap, considering the place to be the dwelling of some spirit or of some goddess.

In memory of the dead are raised blocks of rough unhewn stones called *khatras* which may represent all the dead members of a family but generally those who have died a violent death. *Pāliyās,* literally guardians which are stones dressed and carved into a figure are also raised with similar purpose. These memory stones are daubed with redlead and are laid sometimes under a temple shaped earthen dome and sometimes in open ground in the house-yard or under a *pipal* tree in the outskirts of the village. Instead of stones some *bhārvāḍas* (shepberds)in memory of the dead use small copper plates onwhich a human figure is engraved by the village goldsmiths.The worship of these images and memory stones as followed by backward Hindu communities is simple. Several heaps of cleansed rice, some betelunts, and a coconut are laid before the stone and a lamp is lighted. A black or white flag is stuck in the ground or is tied to the earthen dome, and clay animals, a horse if the spirit was a man and cow if the spirit was a woman, are laid near it. On special occasions *moha* or palm-juice liquor is poured on the stone, a cock or a goat offered to it, and all members of the family sit round the stone and dine.

Idol-worship.

Worship of the duly consecrated images of household and temple gods and goddesses when ceremonially performed follows a prescribed ritual. These are called *upacāras* (ways of service) usually stated to be sixteen. They are : *āvāchana* (invocation) or *svāgata* (welcome), *āsana* (offering of the seat), *pādya* (water for washing the feet), *arghya* (water respectfully offered for washing the hands), *ācamaniya* (the water for sipping), *snāna* (bath, to be effected with five materials called *pañcāmṛta,* viz., milk, curds, clarified butter, honey and sugar followed by pure water), *vastra* (clothing), *yajnopavīta* (sacred thread), *anulepana* or *gandha* (unguent), *puṣpa* (flowers), *dīpa* (light), *naivedya* or *upādhāra* (food), *namaskāra* (bow), *pradakṣiṇā* (going round from left to right as a mark of respect) and *visarjana* or *ūdvāsanā* (ceremonial dismissal). Some works add*bhuṣaṇa* (ornament) after *yajnopavita* and *tāṁbula* or *mpkhavāsa* afte r *pradakṣiṇa.* If a person cannot offer *vastra* (garment) and *alaṇkāra*(ornament), he could perform only ten out of these 16 *upacāras* viz., from *pādya* to *naivedya*; if he cannot afford to offer even the ten he may offer only *pañcopacāra-pūjā* (five services) from *gandha* to *naivedya;* if he has nothing he may perform with flowers alone the 16 *upacāras.* In performing these *upacāras,* the *mantras* (formula) to be used and the offerings to be made which differ according to the nature of the deity, have to be carefully attended to.

Temple-worship.

Temple worship which has developed into a methodology of itself is followed with great ceremony in rich temples belonging to the *Vaiṣṇava Saṁpradāya* (sect). Seven daily *darsanas*

(services) are held which are largely attended by male and female devotees. They are (1) *mangala*, at half past six in the morning or earlier in the winter, when the image is shown as rising from bed; (2) *sringāra* at eight in the morning, when the image is richly attired; (3) *rāja bhoga* at noon, when the image is shown as taking a meal after returning from cattle-tending, the delicacies placed before the image being distributed among servants and votaries; (4) *utthāpana* at three in the afternoon, when the image is shown as rising from repose; (5) *bhogāsama* at four o'clock, the after noon lunch; (6) *sandhya* or *ārati* at about sundown, the evening toilet; and (7) *sayana* after twilight, repose for the night. On all these occasions the ceremony is more or less the same offering flowers, perfumes, and dainties, and waving an *ārati* (lighted lamp) before the image. On holy days instrumental and vocal music accompany the evening *darṣana*.

Hindu-sects.

Regarding the religious sects, among the Hindus of Surat district the following details were given in the census returns of 1872 :

Hindu Religious Sects, 1872, Surat District.

Name of the Sect.	Surat District.	
I. Shaivs	(1) Shankar	47,351
	(2) Lingayats	32
II. Vaishnavs	(3) Ramanujas	1,32,721
	(4) Vallabhachari	19,343
	(5) Madhavacharis	20,664
	(6) Svaminarayans . ..	3,723
	(7) Kabirpanthis	4,746
III. Mixed	(8) Ascetics	942
	(9) Sects undefined	3,00,884
IV. Jains or Shravaks ..	.. .. ..	11,332
	Total ..	5,41.738

Details by religious sects are not given in any later census return· But, as among the Hindus sons generally follow the faith of their fathers the above table may be broadly said to reflect the proportion of their present distribution in Surat district.

Saivism.

Saivaś or worshippers of *Siva* are found mostly among Brahmans; but a large number of Rajputs, Kadwa Kunbis, Bhats, and Suthars also belong to this sect. They worship the deity under the name of *rudra, śiva, sadāśiva, śankara, sambhū, mahādeva, iśvara, nilkantha*, etc., in their own houses

as the family god, as also in the temples which are to be found in almost every village, town or city.

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Siva worship has continued from the earliest times to be the cult of the Brahamans. Rudra is a terrible god in the earlier Ṛgveda hymns, but in the *Yajurveda* he is several times mentioned by the name of Siva and Saṅkara and also Māhādeva. Rudra or Siva though fierce, is besought in the vedas not only to preserve man from calamity, but to bestow his blessings on man and beast, which may account for his euphemistic epithets of Siva or auspicious, Saṅkara or doer of good, Sambhū or origin of good, and Mahādeva or great god. His healing powers are mentioned with special frequency in Vedic literature, and he is praised as the greatest of physicians. Of the *Purāṇas*, four *viz.*, the *skanda*, the śiva., the liṅga, and the *bhaviṣya* specially favour the cult of śiva,.

Towards the close of the eighth century, Siva worship was extended and popularised by Saṅkaracāya. Siva's terrible aspects as *rudra, bhairava, ugra.* and *aghora* easily adapted him to the religion of fear and propitiation prevalent among the non-Aryan races. He thus becomes the deity of the highest and the lowest castes. Sankaracarya established in India four seats where he established his pupils as *ācāryas* (religious heads) and their successive pupils still occupy the *gādies* (seats). Saivas of Gujarat generally come under the sway of a *gādi* known as *Sārdā Pith* (throne of learning) situated in Dwārkā. The chief duty of the ruling Sankarācārya (pontiff) is to preach and disseminate the doctrine of the vedic religion. He is the final authority in religious question, for the followers of Saivism in Gujarāt. Saivas use a traverse streak on their forehead as religious mark. They also put on a *rudrāksa* (Elaccarpus ganitrus) berry, and use *rudrāksa* hand rosaries.

In popular conception Siva is a god whose anger is to be dreaded and whose favour is to be propitiated. His abode is the *kāilasa* where he dwells with his consort Parvati whose other names are Durgā, Kālī, Umā, Bhavānī etc., and his countless servants (*gaṅas*). He is sometimes represented in sculptures and paintings with five faces, (*pancanana*), sometimes with one face and with three eyes. He has a crescent moon on his forehead, a serpent round his neck, and a second neclace of skulls, with numerous other serpents about his person. On the top of his knotted hair he bears the river Gaṅgā, the rush of which he intercepted in its descent from Visnu's foot, so that the earth might not be inundated by the weight of the falling stream. His complexion is sometimes white, from the reflection of the snows of *kailasa*, sometimes dark, from his identification with the dark destroyer time (*kāla*). His throat is blue from the stain of the deadly poison which would have destroyed the world, had he not, in compassion for the human race, undertaken to drink it up upon its production from the

churning of the ocean. He rides on a white bull, called *nandi*, stone or plaster images of which are often placed outside his shrines. As he is constantly engaged in battle with mighty demons, he carries a trident *(trisula)*, a bow, and a thunderbolt (*vajra*). He holds in his hands a noose for binding his enemies, and a drum, *damaru*, which he uses as a musical instrument to keep time as he dances. But, though he is thus depicted in sculptures and paintings in his temples he is worshipped under the impersonal symbol of the phallus or *liṅgum*, for he is supposed to reproduce after destruction, and as such is worshipped as if he were the creator. The *lings* or *bana* is of stone, pyramidal in shape, and from three inches to several feet high. Some of the most sacred of these lingas are believed to be *svayambhu* or self created and *jyotir* or luminous.

The essential doctrine of Śaivism is the existence of a personal deity, the one existent and universal soul without a second, or *advaita*, and the unity of the divine or universal soul, *parmatmā*, with the individual soul or *jīvatmā*. All nature is but a manifestation of the universal soul, takes its origin from that soul, and is eventually absorbed therein. In order to impress this doctrine upon his mind the Śaivite is required by his religion to mutter every now and then, *sivoham*, that is,'I am Śiva'. The daily worship is simple and consists of offering *candan* (sandal), water and the leaves of *billi* (aegle marmelos) to the *linga*. On *Sivratris*, dark fourteenth of each month, and especially on that of Magh called *Magh Shivarātri*, the god is invested with a brass or silver mask, and in winter the *ling* is decked with refrigerated clarified butter in ornamental shapes called *ghina kamal*. In cases of anxiety or of serious illness, as also when the stars foretell an evil planetary trouble, prayers called *rudri* and *mratunjaya japa* (death conquering prayers) are offered to Siva in his temples. This consists in Brahmans pouring water over his *linga* and reciting the *rudradhyava*, or panegyric in honour of *Rudra*. It is recited 11 times in *Rudri*, 121 times in *laghu-rudra*, 121 times in the *Maha-Rudra*, and 14,641 times in the *ati-rudra*.

Vaisnavism.

Visnu a sun-god in the *rgveda* becomes the god of preservation and universal prosperity in the post-vedic period. In post-vedic mythology, Visnu's character for preservation is developed in the doctrine of his *avatārās*, incarnations, literally meaning descents to earth, which he assumed for the good of gods and men. Of these Rāma the seventh incarnation and *Krsna* the eighth incarnation being the most popular throughout India formed centres round which two main types of Vaiṣṇava cults have gathered. Of Rāma worshippers the chief are Rāmānujas, Rāmānandis and Rāmasnehis and of Kṛṣṇa worshippers, Vallabhācāris, Madhvācāris and Svāmināṛayaṇās.

Ramanuji sect.

With a few followers chiefly among Brahmans and Vanias, the Rāmānujis have temples in Baroda, Ahmedabad, Dabhoi, Surat, Viramgam and other towns.

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The sect is so called from the name of the founder Rāmānuj, a Tamil Brahman, who flourished in the twelfth century. Against Sankārācarya's *adwait* or strict "*monism*" Rāmānuja set up a theory called *Viṣiṣṭādwaits* or "qualified monism" maintaining (1) that individual souls are not essentially one with the supreme soul though the latter is their source, and hence the soul after salvation entres into a relation of perfect heavenly service to him, and (2) that the supreme is not purely an abstract being, but possesses real *qualities* of goodness and the like, infinite in degree. The Rāmānujis worship *Viṣṇu,* as *Nārāyaṇa* and his bride *Lakṣmi* or *Śrī*. The special marks of a Ramanuji are a close-shaven moustache, a *tulsi* or sweet basil rosary, and two vertical and slanting lines of white clay on the forehead, a perpendicular red streak for Laksmi in the middle, with a horizontal white clay line connecting the three across the root of the nose, the whole, from one to two inches wide, representing Visnu's throne. There are two main divisions of the sect, *ten-gala* or southern school and *vada-gala* or northern school which differ chiefly in externals. An important difference of doctrine, caused by different views of the nature of the soul's dependence on *viṣṇu,* separates them. The view taken by the *vadagalas* is called the "monkey theory". The soul, say they, lays hold of the Supreme Being by its own free will, act and effort, just as the young monkey clings to its mother. The *tengalas* hold what is called the "cat-hold theory." The human soul remains helpless until acted on by the Supreme Being, just as the kitten remains helpless until transported by the mother-cat. The two divisions are distinguished by different marks on the forehead, to which they attach great importance. The *vadagalas* contend that the mark on the forehead ought to represent the right foot of *visnu*, while the *tengalas* contend that equal reverence is due to both feet. The *tengalas* draw the whole line half down the nose to represent the lotus throne of *visnu*. Both divisions agree in branding the emblems of *visnu-* the disc and conch shell-on their breasts, shoulders, and arms. The sect is very strict as regards food, drink, marriage, etc. Ramanuja died in A. D. 1137.

Ramanandi sect.

The Rāmānandis or Rāmāvatar sect was founded by Rāmānand who was born at Prayag in A. D. 1300. His original name was Rāmadatta. At a very early age he got himself initiated into *saṁnyāsa* at the hands of Rāghavānanda, the fourth apostalic successor of Rāmānuja, and the head of *Srī-maṭha* at Banaras. Tradition tells us that Ramananda was made a *tridandi sam-nyasi* and installed as his successor by Raghavanand himself.

Although to begin with Ramanda was follower of Ramanuja, he differed from Ramanujis on the necessity to observe privacy in preparing and taking food. It is said that Ramananda hav-ing travelled extensively over India returned to one of the monasteries of the sect, where some priest insisted on Rama-

nanda eating apart from the rest of the brethren on the ground that in his wanderings he could not possibly have observed the rule of the Ramanuja sect requiring meals to be strictly private. In resentment Ramananda founded a new sect and to show his contempt for caste distinctions, freely admitted into it men of all castes, even the lowest. He invariably used the current languages for his preachings, and allowed freedom from caste rules in matters of food, social intercourse etc. "Let no one ask a man's caste or with whom he eats. If a man is devoted to Hari, he becomes Hari's own;" so he preached. This resulted in *dheds*, *bhangis*, *chamars* becoming followers of his sect, along with Brahmans, *vanias*, and artizans.

Having initiated the inspiration of the *visistadavdita* (qualified monism) philosophy of Ramanuja, Rāmānanda pioneered *Bhakti* movement in northern India. "*Bhakti* sentiment, according to Rāmānandis, can be expressed and realized through any one of the following mental states with their appropriate behaviour patterns. The states are *sṛṅgāra* (erotic) attitude, *sakhya* (friendly) attitude, and *śānta*-attitude of blissfulness."* To illustrate he placed before the people the pure and chaste theme of Rāma and Sītā, immortalised in charming verse by the great poet Vālmikī. He included the worship of Visnu in the form of Rama with Sita and Laksmana. The initiatory verse for Ramanandis is *Sri Rama* and the salutation *Jaya sita Rama*. The forehead mark is like that of Ramanujis made of *gopicandana*, but the red vertical streak is narrower.

Among the disciples of Rāmānanda twelve became very famous. The list is interesting as showing his utter disregard for caste in matters of faith. They were: (1) Anantānanda, (2) Sukhānanda, (3) Surasurānanda, (4) Narhariyananda, (5) Pipā, (6) Kabīr, (7) Bāvānanda, (8) Senā, (9) Dhanā, (10) Rohidāsa, (11) Padmāvati, (12) Surasari. Of these Pipā was a Rajput, Kabir a Mussalman weaver, Senā, a barber by caste, Dhannā a Jat, and Rohidāsa, a currier or leather dresser. Padmāvati, and Surasari were women and Anantānanda and Sukhānanda were Brahmins. Various minor sects varying in detail have arisen from the Ramanandis, of which those known after Kabir, Sena and Rohidasa are famous. Various branches of the sect known as *dwaras* are found at present in Punjab, Rajasthan and Uttar Pradesh. A *dvara* is known after its founder, and is called *gadi* after the name of the place of its chief centre. A few of them claim a continuous functioning for five centuries.

Vallabhachari sect.

The most important system of Vaisnavism now prevalent in Gujarat is perhaps that of *puṣṭimārga*, the *samba* or *rudra-sampradāya* of Viṣṇusvāmi altered and propogated by his best known successor Vallabhacarya. The philosophic doctrine propounded by Viṣṇusvāmi is called *śuddhādvaita* or pure duality as distinguished from the *kevalādaita* of Sankaracarya and *visistadvaita* of Rāmānuja. It teaches that God, though eternal

* Ghurye, *Indian Sadhus*, p. 198

is endowed with a celestial form, and all visible phenomena emanate from him at his will. *Jivatma*, the individual human soul, is separate in form but identical in essence. Building on this philosophical basis, Vallabha (1479 A.D.), a native of Telugu country and a great Sanskrit scholar, introduced elements of pleasure and enjoyment in divine worship, rejecting the austerity and hardship of the other sects, and called his cult *Puṣṭimārga* or creed of spiritual nourishment. Among other articles of his new creed, Vallabha taught that privation formed no part of sanctity, and prescribed that it was the duty of teachers and devotees to worship the Deity, clothing him in godly raiment and presenting him in choice food.

Vallabhacarya found many adherents especially among the *vania*, *kanbi* and other middle classes in Gujarat. He is said to have distributed among his disciples many images of *Sri Krsna bhagavan*, which are still held in great reverence. Vallabha married and enjoined marriage and worldly life on his successors who are now known as Gosaiji Mahārāj or Gosaiji Vallabhakul. There are seven seats or *gadis* of this sect, each of which is presided over by the lineal descendents of the founder. They are at Ahmedabad and Surat in Gujarat, Gokul, Mathura, and Kankroli in Uttar Pradesh, and Kotah and Nāthadwāra in Rājasthān. There are subordinate establishments in Bombay, Baroda, and most of the larger towns, where they are called *haveli* or palace. Both mental and physical worship are prescribed for the followers of this creed. Mentally the image of Krsna is to be imagined as existing before the mind's eye and to be worshipped without rites or ceremonies. Physically the actual human image of Krsna is to be worshipped with all pomp and ceremony. In their *mandirs*, temples which are built like ordinary houses, without porch or spire, images of Sri krṣṇa in various forms are set on raised platforms and homage is paid by devotees at fixed hours every day. On holidays, the image is profusely decorated seated on a richly carved dais or swung in fancy cradles of glass, ivory, or wood decked with flowers. Seven daily services or *darśans* are held. Thousands of devotees, males and females, flock to the Gosaiji temples and there are many who do not take their food if they have not been able to get a glimpse, *jhanki*, of the Thakorji. The first *darsan* is called *mangala* and takes place at about six or half past six in the morning when the image is shown as rising from bed. The rest are:-- (2) *sanagar* at 8 A. M. when the image is richly attired; (3) *rajabhoga* at noon when the image is shown as taking a meal after returning from cattle tending; (4) *uthapana* at 3 in the afternoon, when the image is shown as rising from repose; (5) *bhogasana* at 4 P. M., the afternoon luncheon; (6) *sandhya* or *arti* at about sun-down; and (7) *senj* or repose for the night after lamp light. Initiation of a novice begins in childhood. The first instruction begins between the second and fifth year. The novice is taken to the Maharaja who repeats the formula *srikrsna saranam mama, i. e., srikrsna* is my refuge. After the child is made to repeat the initiatory prayer, the Maharaja

passes round his neck a basil *(tulsi) kanthi* or rosary. A later and more important initiation takes place after the eleventh or twelth year and at or before marriage for females. After the second initiation, the votary is supposed to consecrate his *tan* body, *man* mind, and *dhan* (property), to the deity. The ceremony is called *brahma sambandha* or union with the Supreme Being. The Vallabhacari browmark consists of two red perpendicular lines converging in a semi-circle at the root of the nose. Though the sect has no *sadhus*, some of the followers take the *samarpan* or dedicatory vow and do not eat food cooked for them by others. They are called *marjadi*. They do not ordinarily eat in metal vessels but use leafplates and obtain their drinking water in canvas covered receptacles.

Swaminarayan sect.

The epicurean principles of the Vallabhācāri sect sometimes assumed very unseemly forms and the reaction against them led to the reform of the Vaiṣṇava church early in the nineteetth century by Sahaj nand Swāmi, a man of deep religious feelings and high morality whose sect, known as the Swāminārāyan sect. is at present of great importance in Gujarāt and has a large number of followers among many communities. Sahajananda was born in A. D. 1780 at the village of Chhapai, eight miles from Ayodhya in Uttar Pradesh. His parents dying when he was 11 years old, he became a recluse and committed the *Bhagwat Gitā* and *Viṣṇu Sahasra Nāma* to memory. In 1799 he began to associate with a body of Ramānandi *sadhus* and in 1800 was initiated with the name of Sahajananda. He began to preach the *visisadwait* faith of Rāmānuja with such effect that the then head of the Rāmānuja body appointed him his successor, During his rambles, he visited Gujarat several times, and being offended at some of the practices of the Vallabhācari sect, preached chastity and purity of soul as the key-note of religion. By his preaching and his own exemplary life, he succeeded in making many converts, chiefly among the lower classes. When he knew that he had gained sufficient ground, he boldly asserted that he himself was an incarnation of Krsna, born to restore the Vaisnava faith to its former purity. He died in 1830 at Gadhada in Kathiawad where his *pādukās* footmarks, are worshipped. Being a celibate he adopted two of his nephews, one of whom was installed at Ahmedabad and the other at Vadtal. Their descendants are the hereditary *Ācāryas* of the sect. Though the *acaryaship* is hereditary it requires a confirmation by a council of four *brahmacaris*, four *sadhus*, and four laymen, *satsangis* before accession. If the *acarya* does not behave properly he may at any time be deposed. Such a course was actually taken at the Vadtal *gadi* about forty years ago, for the first time in the history of the sect. The tenets of the Swaminarayan sect are embodied in a book called *Vacanamrta* nectar of precepts, which is a treatise on all branches of religious philosophy. Their authoritative works are the *vedas*; the *vedānta sūtra* of Vyasa, as interpreted by Rāmānuja; the *bhāgwat purāna*; three chapters of Mahābhārat, *viz*., *viṣṇu sahasra nāma; bhagwat gitā* and *vidur niti*; and

vasndco mahatmya, a chapter of *skandāpurana*. The bookwhich is usually read by the followers of the sect in their daily prayers is called *Sikṣā Patrikā* or book of precepts embodying pracatical ethics. It prohibits the destruction of animal life, promiscuous intercourse with the other sex, use of animal food and intoxicating drinks and drugs, theft and robbery, blasphemy, false accusation and caste pollution. The ceremony of initiation begins with the novice offering a palmful of water at the feet of *acarya* saying "I give over to Swaminarayan my mind, body wealth and sins of (all) births *(man, tan, dhan ane janamna pap)*". He is then given the sacred formula *Sri Krsna twam gatir mama*, " Sri Krsna thou art my refuge." The novice then pays at least half a rupee to the *acarya*. Ordinarily every follower is expected to present to his *acarya* a twentieth of his income, while the more devout are expected to pay a tenth. Before eating he is enjoined to worship the image of Sahajananda Swami which he keeps in his house along with the *siksa patrika*. He also worships his foot-prints on a piece of cloth and tells his beads repeating his name. There is a Swaminarayan temple in almost every important village which is attended either in the morning or in the evening, or at both times, by the followers. There are separate passages in the temples for women and also separate reading and preaching halls for them. The distinguishing mark which followers of the sect make on their forehead consists in a vertical streak of *gopicandana* clay or sandal with a round red powder mark in the middle. They also wear a necklace of basil beads.

Jainism.

Jains take their name from the fact that they are the followers of 24 *jins* or conquerors, commencing with Rishābh or Ādināthа and ending with Pārśvanātha and Mahavira.

Of the twenty-four *Jinas*, Jainism was perhaps founded by Pārśvanātha about 200 years before Buddha. It was reformed and firmly established by a Kshatriya prince named Vardhamāna or Mahavira, who was born at Vansali near Patna about 599 B. C. He is said to have been originally an erring man who by his own power attained to omniscience and freedom and who out of pity for suffering mankind preached to others the way of salvation which he had found for himself. Because he conquered the *manus* in the human heart he became known as *Jina*, the victor, from which term Jainism is derived. He is also called *Jineshwar*, chief of the Jinas ; *arhat*, the venerable; *tirthankar*, the sage who has made the passage of the world; *Sarvagna*, omniscient; and *Bhagwat*, holy one. His followers were mainly Kshatriyas and Vaishyas, for the artisan classes were but little affected by his propaganda.

Religion.

Sravaks follow Jainism and are divided into two leading sects, *digambars* or air-clad and *śvetāmbar* or white-robed. The Digambaras are also called Ummad and the *śvetāmbars tappas* Among *digambars* the image has gold eyes fixed with glass and a piece of linen carved round the loins. *Digambars*

priests are naked and keep to their monasteries, and the *Śvetāmbar* priests are clothed. Of the two sects, the *śvetāmbar* sect has by far the largest number of adherents in Gujarāt. The *śvetāmbars* are sub-divided intoe ighty-four sub-sects or *gachhas* ,of which about fifteen to twenty only now remain. Of the existing *gachhas*, the Lonka *gachha* is more careful not to destroy animal life than the other *gachhas*. They believe in *arhats* or saints but are opposed to idol-worship and ridicule the idea of an idol granting a prayer. The *Śripūjya* or spiritual head of the *gachha* resides at Baroda and has *thivars* or deputies at Delhi, Ajmer and Jalar. The *Śripūjya* goes every year on tour, visiting his disciples. About 500 years ago a schism arose in the Lonka sect. A priest disputed the authority of his *Śripūjya* and was expelled from the congregation. He practised severe austerities, and gaining a large following, founded a new *gachha*, which is called *dhundia*. Like the parent *gachha*, the *dhundias* are opposed to idol-worship and building temples, and accept only thirty-two *nitlu*, or aphorisms of the Jain faith. Their priests do not beg but live on such offerings of food and clothes as are freely made by the congregation, and own no property. They are clad in white, and mask their mouths with linen to prevent their breath from killing insect life.They never stir out in the rain lest they should kill some animal, and always brush the ground before they sit. Some go even to the length of brushing the ground in front as they walk. They neither wash their clothes nor any part of their body. The *dhundias* are mostly found in Saurashtra. Their opposition to idol-worship has alienated most of their adherents in Gujarat proper.

Though idol-worship is prohibited by Jainism, *śravāks* worship the images of the twenty-four Jain *tīrthankars* or patron saints. In their temples or *dehras* are also placed images of Hindu gods and goddesses below the idol of the principal *tirthankar* in the temple or in other niches or shrines or upper storeys. The ministrants at the temples are mostly Shirmali Brahmans, sometimes Tapodhans, Malis and Kanbis. These ministrants, except when on duty are allowed to act according to their own religion. Any Hindu who is not flesh-eater or spirit-drinker is considered a fit temple servant. The principal holidays of *śravāks* are the *pachusan* or *paryusan* that is, the sacred season, and *siddhachakra pujā* or saint wheel worship. Among the Ś vetāmbars, the *Pachusan* begins with the twelfth of the dark half of *Shravan* and ends with the fifth of the bright half of *Bhādrapad*. Among the *digambars* the *pachusan* lasts for fifteen days beginning from the fifth of the bright half and ending on the fifth of the dark half of *Bhādrapad*. The whole *Pachusan* period must be observed as a fast period but except a few devotees, almost all fast on the last day only. The *Siddhachakra Pujā* is performed twice a year in *Chaitra* and *Asvin* and lasts for nine days beginning on the seventh and ending on full moon day.

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The Hindus of Gujarat and so those of Surat generally follow the *vikram Saṁvat* (era) which precedes the Christian era by fifty-six years. The year begins with the month of *Kartaka*, gets divided into three seasons namely *siyalo* (cold season) consisting of the months of *Kartak*, *Māgaśara*, *Posa*, *Mahā*-*Unālo* (hot season) extending over the months of *Phāgna*, *Caitra*, *Vaiśākhā* and *Jetha* and *comasu* (monsoon) comprising the months of *Āsādha*, *Sravana*, *Bhādarvo* and *Āso*.

Each month is divided into two fortnights, *kṛṣna pakṣa* (*vadya paksa*), the dark fortnight when the moon is waning, and *sukla paksa* (*suddha paksa*), the bright fortnight, when the moon is waxing. Dates are reckoned by the day of the fortnight of each month. According to the *purnimānta* method of reckoning the month ends at *purnimā* or full moon; according to the *amants* system, the month ends at *amāvāsyā* or no moon. The latter system is generally followed in Surat.

Almost in every month occurs a *tahevāra* (festival) or a *vrata* (vow) or a *mela* or *occhav* (religious gathering or fair) which the Hindus follow with a religious sentiment. These get a mention in an almanac (*pancangā*) but, in their obseravance a person is led by the tradition of his family, caste and the local usage. Many of these are celebrated with festivity and could be called holidays. The following is an enumeration, month by month, of the annual holidays and their customary observance followed by the Hindus of Surat.

Kartak.
Besatu varsa.

The first day of the month of Kārtaka (October-November) is the beginning of a Samvat year. On this autumnal new year's day (*besatu varsa*) *annakutas* (mounds of food) made of dishes prepared of the new food crop are ceremonially offered to Shri Dākorjī. Everybody begins the year well by getting up as early as possible. The men after performing their morning, duties very early, go out to buy *saburasa* (salt), the essence of everything, with the belief that performing this lucky first action on the new years day sets the tone for the whole year. The women of the family get up early, and get energetic over the sweeping and cleaning of the whole house.

Cows and bulls are decorated, worshipped and well-fed. The trading classes open new account books on this day, worship them under the name of Saraswati with all the sixteen acts of devotion., sprinkle the first leaf with *kanku* and make on it a few fictitious entries for good luck.

Bhai-Bij.

The second day of *Kārtak* is known as *bhai bij*. On this day brothers visit their sister's houses, the sister waves *arati* to the brother and the brother reciprocates the affectionate feelings of the sister with a present.

Labha Pancam.

The bright fifth of *kartāk* is an auspicious day for traders to make sales and purchases. On that day they plan their trading

activities for the year, start new enterprises or enter into new transactions calling the day *labha pancam*, (gainful fifth).

Ekdashi Devuthi

All *ekādaśis* (elevenths) occuring twice in every month are held sacred by Hindus but of these the two, namely *Dev-uthī Ekādāśi* (God-rising eleventh) and *Devpodhi Ekādāsi* (God sleeping eleventh) coming on *Kārtak Sud*. 11 and *Asādha Sud* 11 respectively are famous and known as *Mahā Ekādasis* (great elevenths). They mark the limit of the four sacred months known as *caturmas* during which God Viṣṇu is supposed to go to sleep resting on *śesa-nāga*, the great serpent in the *kśira-sāgara* (milkocean). All auspicious ceremonial activities such as betrothal, marriage, thread-girding etc. are suspended during the period and orthodox persons, practise various fasts and austerities desisting from a number of articles such as *ringana* (brinjals), *kolu* (pumpkin), *mogari* and *mula* (radish and its pods), onions etc. Both the great *ekadasis* as they mark the beginning and the end of *caturmas* are observed as days of fast and festivity.

Tulsi-Vivaha.

On the eleventh day of the bright half of *Kā rtaka* or as may be the custom on an auspicious day between *Kārtaka* 11th to 15th, some high caste Hindus, particuarly Vai ṣ ṇvas celebrate every year the marriage between the image of Visnu (God *Krṣṇa*) and Tulaṣi, the plant *Ocimum sanctum* or the holy basil. When the ceremony is to be on a small scale the image of Viṣṇu is richly dressed and is taken in the evening to the basil plant over which a booth of sugarcane cuttings is raised. The family priest officiates at the marriage ceremony which is conducted by the head of the family and his wife. Marriage verses are chanted and the plant and the image are united by the marriage garland. The plant is covered with a woman's robe and an iron ring and a wristlet are tied to one of its branches. Some women fast for three days after the eleventh, keep a lamp continucusly burning, and the fourth day is kept as a vigil or wake. Some well-to-do pious and childless persons celebrate this marriage on a grand scale. With this marriage of Viṣṇu with Tulaṣi begins the yearly marriage season for the Hindus.

Dev-Divali

On the bright fifteenth of *Kartak* comes *dev-divālī* which is celebrated as the concluding day of *divālī* festivities.

Tara-Vrat

For the whole month of *Kārtak* some women commit themselves to a vow called *tārā vrat* and bathe in a river early morning every day only afer looking at a star.

POSA
Makar-Sankrant

The day the sun enters the sign of *makara* (capri cornus) is known as *makara-sankrānt*, and as the sun then first passes to the north it is also called *utarayana* or northing *saṅkrānta*. As a solar incident the day falls on the 14th of January but its *tithi* (lunar date) in *Poṣa* is not the same

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every year. On this day *saubhagyavantis* give at least to thirteen Brahmans a *dana* (gift) of jujubes, sugarcane, plantains, gram (cicer arietinum) plants, a mixture of rice and *mag*, *talasankani* (balls of white sesame and coarse sugar) and a copper coin.

Beginning with this day married girls sometimes vow for a year to apply *kaṅku* marks (*cāṇḍlo*) every morning to the brows of at least thirteen *gorāṇis* (married Brahmin women). Ladies feed cows and children with *ghugari* (boiled *juvar*) mixed with *gur*. To earn special merit sesame-sweets are eaten and exchanged and as a mark of social festivity both the young and the old freely contest at kite flying on this day.

MAHA.
Vasant-Pancami.

The bright fifth of Mahā is known as *vasanta-pañcami* inaugurating the spring (*vasanta*) for the year and at some places, particularly in *devi* temples, it is celebrated with festive activities such as dancing, singing and music.

Mahashivaratri.

The dark fourteenth of *Mahā* is called *mahāśivarātri* (Śivās great night) and is observed as fast day by *Śiva-bhaktas* (worshippers of Siva) and others. Steamed potatoes and *sakaria* (sweet potatoes) are freely included in the fast-diet and the next day there is a feast of *ladus* (sweet balls). In the evening the deity is taken in a procession and in the night there is feast of lights.

PHAGAN.
Holi.

The festival of *hoḷī* takes place on the full moon of *Phāgaṇ*, and is a regular saturnalia among the lower orders. On this day fire is lit in houses and at the crossing of four roads or outside the village. In a public celebration of *Hoḷī*, a hole is dug or an earthen platform is raised near the spot and the hole or platform is strewn with red powder and flowers. The main roads are festooned with mango or *āsopālav* leaves and miniature paper flags. In the evening fuel gathered from the street people or filched from fuel-carts passing through the street is piled over the spot. In the afternoon the street people assemble, often indulge in abuse and in mock fights, and in the evening or at midnight one of the street people or in villages the headman with the help of a Brahman offers sandal-paste and flowers to the pile which is then lighted with a torch, sometimes by a *vagri*. When the whole is ablaze *ghee*, fried *juvar*, and gram, and several dry dung-cakes strung together are thrown in the fire. The worshipper then walks seven times round the fire, pouring water as he walks. At the end of the seventh round he offers a coconut. The street or village people then walk seven times round the fire and besides fried gram offer it the unopened leaves and loppings of the mango, *moha* and *shami* trees. Newly married couples, mothers with children, and all who want to guard themselves against fever and sore-eyes worship the *holi* fire for which they have to keep a day-long fast.

The people throw *gulal* (red powder) at each other and play outdoor games all night. Next morning, which is called *dhuleti* (from *dhul*, dust), people of the lower orders throw dust at one another and improper expressions are vociferated in the streets. This latter practice is however now appreciably diminishing.

CAITRA. *Gudi-Padvo.*

For Hindus the month of *Caitra*, like *Māgaṣara*, is auspicious. Those who follow the *Sāka* era count the first day of *caitra-guḍī pāḍvo* (the pleasant first) as their New Year's Day and go through the same religious and social observancies that others do on the first of *Kartaka*. It is customary for some to eat that day tender leaves of the bitter *neem* mixed with sugar or salt as a prophylactic against fever.

The first *nine nights* of *Caitra* are dedicated to the goddess Pārvarti, the wife of Siva, and some very devout men and women keep a light burning all these nights in her honour and observe the days as a partial fast, eating only fruit and milk-sweets.

Ram-Navami.

The bright ninth of *Caitra* is celebrated as the birthday anniversary of god *Rāma* , the seventh incarnation of Viṣṇu and the hero of *Rāmayana* The god was born exactly at noon, and at that hour the temple bells begin to ring and people throng in Rama's and Visnu's temple for the *darsana* (sight) of the deity. Some observe a fast on the day and spend the time in hearing a reading of the *Ramayana* or joining in a singing of *bhajans* (devotional song).

Aluna-Vrata

Some women practise penance for the whole month of *Caitra* by living on a *aluṇā* (saltless) diet. Those who cannot undergo the austerity for the whole month observe only the last day. To hear the story of *okhā haran* in the month is considered meritorious.

VAISAKHA. *Akhatrija.*

The third day of the month of *Vaiśākha* is called *Akṣayya tritȳā (Akhātrijā)* 'the undecaying third', and is supposed to be the day on which the storms of the monsoon commence and the sea becomes unfit for navigation. It marks the beginning of the agricultural year in Gujarat and is considered a day of auspicious beginning for agricultural operations. It is a great day of omens. It is a custom at places for villagers to build outside the village on the evening of the previous day a model town built of corn and stored with little heaps of various grams and commodities. On the morning of *akhatrija* the villagers examine the model and make a forecast regarding the condition of crops and commodities according as the small heaps are attacked by ants or other vermines or are left unmolested.

JETHA *Vata Savitri*

In memory and in imitation of the hard penance practised by Sāvitri to get her dead husband Satyavān resurrected, married

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women observe *vata sāvitri vrata* (the vow of *vaṭa sāvitri*) for the three days from the bright thirteenth to fifteenth of *Jeṭha.* The strictly orthodox women subsist only on water and mangoe during the fast and conclude the vow with the worship of the *vaḍa* (banian tree). With the object of lengthening their husband's and their children's lives, married women may worship the banian tree on all full moon days.

ASADHA.
Rath-Yatra

The bright second of *Āṣāḍha* is observed as a festival particularly by the Vai ṣṇavas. In the morning an offering (*naivedya*) consisting of sprouted *maga* (green gram) *jāmbu* (jambul), *Kerī* (mango) and *dādam* (pomagranate) is made to *Viṣṇu* and then freely distributed as *prasāda* of the deity. Eating of the Jambul fruit this day carries special merit; some (Jains) stop eating mangoes for the season from the day.

Divaso or Dip-puja (Lamp-day).

Distinct from *divāli* which is a well-known period of annual festivities, is another day called *divāso* or *deep-amāvāsyā,* or the last day of *Asāḍhā* devoted to the worship of family lamps or *deepas.* All the lamps in the house are artistically arranged within an auspicious drawing on the floor and devoutly worshipped by married ladies of the household. Sweets are prepared as *naivedya* (offerings) to the God of light, and served at the meal. A folklore story with the adage 'lamps bring wealth, (*deepam Lakshmikaram*)', is related in praise of the day.

SRAVANA.
Naga pancam

On the fifth of the bright half of *śrāvaṇa* comes the festival of *nāgapañcamicami* or the cobra's fifth. On that day the head woman, if not all the women of the family, worship the cobra or its image. The sight of a live cobra is considered lucky that day, and in some towns living cobras are taken by snake charmers from house to house. to be worshipped and fed on milk. After worship the woman bows to cobra's image saying 'my children are your children, therefore pray do not frighten them'. On that day the women of the family, particularly the head, eat nothing that has been cut or pounded.

Randhana chath.
Sitala Satam

The next day *i. e.* the sixth of *Śrāvanā sud* is obsrved as *rāndhanachaṭh,* the Cooking Sixth and is devoted to the preparation of food for the day following it is sacred to *sitlā sātam.* or the small-pox goddess and is known as *sītalā sātam.* Small-pox is believed to be caused by heat and the goddess is supposed to wander about on that day among the ovens, on which account artificial heat is as much as possible avoided on that day and fire is not lighted in the ovens for fear of annoying the goddess. The lady of the house, if not all the members of the family, bathes with cold water and goes to visit the small-pox goddess under a *pipal* (ficus religiosa) tree on the river bank and offers worship. Five, seven or thirteen boys and girls are fed on

stale food (cooked the previous day) near the goddess if any member of the family has suffered from small-pox in the course of the year. The female head of the family partakes only of the cold meal that day.

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Sravani Balev. Coconut-day.

The full-moon day in the month of Śrāvaṇa derives its importance from the observance of four distinct ceremonies, namely, (1) *śravaṇī*, (2) *rakṣā bandhan*, (3) *balev* and (4) coconut day.

On this day Brāhmanic classes entitled to wear *janoi* (sacred thread) change their *janois* after worshipping Viṣṇu and offering libations of water to deceased ancestors. Technically this ceremony which consists of several rites is known as *śrāvaṇī*. The day is also known as the day of *rakṣābandhan* as that day sisters tie *rākhis* or *rākhadīs*, amulets, silk and gold threads, round the right wrist of brothers as a charm protecting them from evil during the ensuing year.

The day is also known as *nārielli pūnam* or coconut day as, particularly on sea coast towns, this day, merchants and traders, to appease the rough waters of the monsoon sea, offer worship and pray for the safety of their ships and throw a coconut to please varuṇa dev (uranus) who rules all waters. Sailing vessels are first put to sea on this day and *kharvas*, *machis* and seafaring classes worship the sea by pouring milk (and formerly liquor) and by throwing flowers and cocoanuts into the sea. The day is also called *baleva* or Bali's day to mark the anniversary of Bali raja, a mythical king, who as the legend says, was thrust down to *pātāla* (nether-world) by Visnu in his dwarf (vāman) incarnation treading on Bali's head. It is also said that on this occasion Lakṣmī tied silken thread to the wrist of Balī, and so many Brāhmins go to their patrons and tie silken or golden thread to their writs.

Janmastami.

On the eight of the second half of *śrāvaṇa* comes a festival in honour of *Kṛṣṇa's* birthday known as *gokulāṣṭamī* or *janmāṣṭamī*.. *Kṛṣṇa* of course is the accepted eight incarnation of *Viṣṇu*.. He killed Kansa his maternal uncle and helped the Paṇḍavas in their struggles with their cousins. It is the celebration of his birth that gives its name to the *janmāṣṭami* day from *janmā* birth, *aṣṭamī*,, the eighth. In some families this cermony begins on the first day of the dark half of *Srāvāna* and lasts for nine days. *Kathās* or *kirtanas* consisting of devotional meetings in which recitations from Mahābhārata intermixed with interpretations, traditions, and funny stories are held during the eight nights. On the eighth night the birth ceremony is celebrated and on the ninth day a row of unglazed ceramic pots containing sour milk is hung from a pole supported by two uprights and broken. Devoted young and old people dance below them in supposed imitation of the pranks of Kṛṣṇa during his stay among the cowherds, This ends the ceremony.

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Kevada Trij.

The bright third of *Bhādaravo* may be kept as a *vrata* (vow) day by both married and unmarried women. They fast on the day taking only *phalahar* (fruit and milk diet,) worship Mahadev, hear to a recital of the story of Kevada-Trij and keep vigil for the night engrossed in devotional activities.

Ganesh Cauth.

The bright fourth of *Bhādarvo* is observed as the brithday anniversary of god Gaṇesa, when the deity is worshipped and a feast given to priests and Brahmans the next day. In Gujarat the day is not attended with grand festivities as in Maharastra.

Rsi Pancam.

The bright fifth of *Bhādarvo*, called *ṛṣi pāñcam* or *sāmo pāñcam* is set apart for the worship of gram. On this day, particularly among agricultural classes, no woman who is of age eats salt or any grain that has been grown in a ploughed field. They eat the seeds of a grass called *sāmo* and *namar* a coarse rice which grows in waste lands or ponds. This is supplemented with vegetables grown in the houseyard or in an unploughed garden. Women desist from grinding or threshing corn on this day.

Dharo-athem.

The bright eighth of *Bhādarvo* is sacred to *dhāro* grass (Cynodon dactylon), Gaṇapati's favourite offering. The day is kept as a fast day and women particularly those who are barren worship the grass by dropping water, flowers, *kaṅku* and rice on it. Kanbi women do not cut grass or any other vegetable that day. *Bhāgvat saptāh* (seven days recital) is observed for the seven days following the *āthem*.

Sraddha-paksa.

The fifteen days of the second or the dark half of *Bhādaravo* is sacred to the spirits of all dead ancestors and are called *Pitra pakṣa* (the spirit's fortnight). In the name of each ancestor, whether man or woman, *sapiṇḍa śrāddha* is performed on the day corresponding to the *tithi* (day) of death. Yearly obsequial rites in honour of unwidowed mother are performed on the ninth day, known as *dosioni-nom* or *sakhe-nom* and those for all dead children on the thirteenth day, known as *bālabholāni terās*. And on the fifteenth day there is *sarvapitriamāvāsyā* for any ancestors whose worship may have been left out. When the rite is over, a dish of *khir*, *roṭalo* and saltless *bhāt* is left on an undisturbed spot like the roof of the house for the crows to feed on, and a rich dinner with sweet dishes is served to Brahmins, relations and friends.

Manekathari Punam

The full-moon day of *Āso* is kept as a holiday by high caste Hindus and is known as *mānekathari* or *śarada* or *kojāgari pūnam*. That day supper is taken in open moonlight and as the rice crop is reaped before this time, pounded rice and milk, after they are offered to the moon, form the chief

articles of the supper. The moon is the nearest to the earth that night and the moonlight is peculiarly cool and refreshing. If a rain-drop on this night falls into the mouth of an oyster it is believed to turn into a pearl and hence the day is called *mānekathari*

HOLIDAYS
Aso

Norta.

The *nortā* or *navarātri* (festival of nine nights) which begins from the first day of *Āso* is sacred to devi the goddess, whose ten manifestations and several exploits are described in the *devi mahātmya* of *markandeya purāṇa*. It extends over nine nights and is immediately followed by the *daśerā* so called from *daśa*, ten and *ahars*, day. Some consider *daśerā*, a ten-day festival in honour of the goddess Durga and call it Durgotsava. On the first day is performed the ceremony of *ghaṭasthāpanā*, the invocation of the goddess to be present in the *ghaṭa*. The goddess is 'invited' with due acts of worship to occupy her temple and is daily worshipped for nine days. Throughout the period a Brahmin priest reads *Saptaśati* hymns in praise of the goddess. An earthen vessel, pierced with numerous holes, and containing a light, is placed near the trident. A lamp, fed with *ghee* and placed upon a stand is kept burning night and day before the goddess during the nine days of *nortā*.

People who cannot afford to instal the goddess in their homes go and worship it in the houses of their friends and receive auspicious marks and sweetmeats.

In the evening unmarried girls, carrying *garbo* (pierced earthen pots with lights burning in them), go round and sing in their neighbour's houses and in return beg oil for their lamps, and a pice. Sometimes, in booths (*garbis*) specially erected and decorated for the festival at corners of the main streets of the town, a *divaḍu* (tall lamp) is installed in the name of the goddess and kept burning. Different parties go round the town visiting the *garbis* and walk or dance round or before the *divaḍu* clapping their hands and singing songs.

On the ninth day of the festival the *homa* sacrifice is performed in the principal temple of the town and in those houses where the goddess has been installed. A *naivedya* (food offering) consisting of a special dish made of rice, milk and sugar and another of nine kinds of vegetable cooked together is prepared, offered to the goddess, and then freely distributed and eaten by the worshippers.

Dasera.

The day immediately succeeding the *nortā* is *daśerā* a festival which commemorates the destruction by Rāma of Rāvaṇa the giant-king of Lanka (Ceylon), and the entrance of the Pāṇḍavas into Virāṭanagar after defeating the Kauravās-events described in the two great epic poems of the Hindus. On the morning of the *Dasera* day many Hindus take an early bath and worship their religious books *(granths)* and household gods and in the afternoon they don holiday attire and visit the temple.

The *daśerā* day is considered highly auspicious for the under taking of any new work or business.

HOLIDAYS

Divali.

punam or the pearl-making full-moon. People enjoy the night by holding singing parties, playing at *ātyāpātyā* or dancing the *garbā*.

The divāli festival marks an important holiday celebration of the Hindus. It lasts from the 13th day of the second half of *Āśvina* to the 2nd of *Kārtik*. According to the *śāstras* Divāli holdiays consist of three days namely the 13th, 14th and 15th of the second half of *Āśvina* but by custom the two succeeding days namely *balipratipadā* and *yamadvitiya* get added to them making the whole a five days festivity each day having its separate significance.

The first day of the festival which falls on *Āso vad* 13th is known as *dhanaterasa*. In the morning after ablutions the householder carefully cleanses a few silver coins, places them on a low wooden stool and worships them with full sixteen acts of worship. Shepherds, cowherds, and others, on this day adorn the animals they tend and worship them. Fishermen in like manner colour and worship their nets. In the evening the people of the town or village assemble outside the gate to see the cowherds drive their flocks and cattle from the fields at full gallop. Houses are illuminated in the evening with *kodiyā* (earthen lamps) lighted in rows all about the house.

The next day *i. e.* the *Āso vad* 14th known as *kāli vahi-pūjan*. is dedicated to the worship of Hanuman and the night is considered as a favourable time for the practice of magical rites. Baths are taken before sunrise, to mark the death of the demon *Narakāsur* at the hands of Viṣṇu. The illumination is repeated this night also.

On the 30th or last day of the month which is also last day of the *Saṁvat* year, merchants hold a great *pūja* known as *Laxmī-pūjan* or *vahi-pujan*. Bankers and merchants spend the last four days of the Hindu year in settling their affairs and while the old accounts are being balanced, a set of new books has been bought, and after four o'clock in the afternoon of the last day of the year, *Brahman* priests are asked to the office where the banker, the clerks, and many of his friends meet to worship the books. The ceremony is called *vahi-pūjan* (book-worship). The new books are piled on a wooden stool generally in front of Lakśmī, the goddess of weath, lighted lamps are placed round them, and flowers are strewn on the books. The priest repeats a prayer for the favour of the goddess on the next year's business, and dipping his fingers in saffron or *kaṅkū*, makes a round mark on the first page of each book. The worship comes to a close by writing on the wall of the room auspicious words like *Sri gaṇeśayanamah*, 'Salutation to the great Gaṇeśā. Presents are distributed to Brāhmanās and gifts made to dependents and friends.

GAMES

A number of forms of physical activity such as games, sports and amusements are traditionally known to the people. Of these, those that are in practice for a long time in the region are mentioned below, with a brief description of their distinctive characteristics.

In the early play activities of children could be marked a number of games of the "imitative" or "make-believe" type, wherein various roles like that of a cartman, horse-driver, engine, driver, music-player, and palanquin-bearer are enacted with fidelity to real life. *Ghoda-ghoda* (horse), *gadi-gadi* (cart), *ag-gadi* (railway), *palkhi* (palanquin) are games of the sort played with no set rules but with a good team spirit, every player having a part to perform. *Ghar-ghar* is the game of house-keeping often played enthusiastically by girls with secondary roles given to boys. "Doll's marriage" *dhinglinu -lagan* may form a part of *ghar-ghar* or be played as a game by itself when planned on a grand scale. *Cakkar ghumar* is a game of whirls which children in imitation of each other start playing by going round and round oneself till the quaint sensation of giddiness sets in.

In games of more or less organised types, the method of "counting out" *pakawu* and choosing players is by itself an interesting process. One player in the group, generally the leader, does the "counting out." He repeats a rhyme or jingle-touches one player on the chest or head for each accent of the "formula," always beginning from himself and than touching the one on the left and so on all around the group in a regular order. The player on whom falls the last account is "out", that is, he is eliminated from succeeding counts. The procedure is repeated until one player is left out, who becomes the "It." The toss-up or *lili-suki* (wet and dry) is a very simple and well-known method of deciding the "it". Another method is as follows. Out of the group of players three at a time simultaneously raise their hands and let fall their palms in a clap. The one who joins his palms unlike the rest is replaced by another player. This is repeated till the "it" is decided.

Minor-Games
Tag-games.

Pakad dāv. (ordinary tag).—The player scatter over the playing area and one player chosen as the "it" chases the rest in an attempt to touch one. Any player tagged by the "it" becomes "it" and the old "it" joins the runners. The players add to the zest of the game by venturing as close as possible to the "it" and taunting him with their proximity and suddenly dodging away. A number of variations occur in the tag-games.

Chhapā-tāḷi is a tag game with the restriction that the "it" cannot touch any player that squats and the player who squats cannot get up unless touched by some other player who is on his feet.

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Andhāli-dāv (blind man's bluff). One player is chosen to be blindfolded and stands in the centre. Others circle round him. The blind man tries to catch any, and when a player is caught the turn is on him.

Santā-kukḍi (hide and seek).—There must be some hiding places in the playing area. The "it" is chosen and he is blindfolded. The players run and hide, one of them signals with a shout to say that they are all hidden. On this, the "it" unfolds his eyes and starts searching the hidden players who rush to the spot and touch an object previously agreed on before the "it" can touch them. The player touched by the "it" before he touches the object becomes the next "it".

Vāgha-bakarī (the tiger and the goat).—All players but one become goats and file behind the leader who becomes the ***bhārvād*** (shepherd). Each player holds the one in front by the waist. The extra player, who is *vaghā* (tiger), moves from side to side in front of the shepherd and tries to touch any one of the goats, the shepherd protecting them by moving himself as the tiger moves. The goat touched by the tiger becomes the new tiger and the old one joins the goats.

Topi-dav.—Players sit in a circle facing in, and the "it" runs round the circule with a *korḍā* (knotted kerchief) or a cap which he places unnoticed behind one of the players. If the player is alert, he immediately picks up the cap or *korḍā* and becomes the "it" and runs round the circle to place the cap or *korḍā* behind some other player. If the "it" completes one round and reaches behind the player without the latter noticing the cap or *korḍā* he picks up the cap or *korḍā* and with it beats and chases the player till he takes one round and resumes his seat. In that case, the same "it" continues to run round and keep the cap or *korḍā* behind some other player.

Chhuti-dadi or mār-dadi.—A soft ball either of rags or rubber is tossed up in the air for all to catch and the player who succeeds tries to hit with the ball any other player who tries to dodge. The game can continue indefinitely, the players running about either to get the ball or to avoid being hit by it.

Dahi-no-ghodo is a tag game played like *chhapatali.* The "it" closes his eyes and hides his face in the lap of another player while the other players hide themselves. This player then says, "*dahi-no-ghodo, ramto-jamto, pani-pito, chhutto.*" The "it" then tries to seek out the hidden players and tries to tag one of them. The one who is tagged first becomes the new "it" and the game continues.

Lakade ki dhum dhum.—In this game the players except the "it" stand touching a wooden post or pillar. Each player may find one post or pillar for himself or more than one

player may touch a wooden post. They go on running and exchanging places shouting *'lakḍe ki dhām dhām dheḍiā.* The "it" tries to tag any player who is not touching any wooden post. If the "it" succeeds in tagging him before he touches a wooden post the tagged player becomes the new "it" and the game continues.

Alak calāṇu.—This is a game played by girls. Four girls stand in four corners in an enclosed space. The fifth girl who acts as the "It" goes to each of the girls standing in the corners and enquires whether she is welcome in her corner. The girl so requested points out some other corner and says, "*bai pele gher bhānu*". Thereupon the "it" runs to the corner pointed out. In the meantime the other girls try to exchange their corners. The "it" tries to tag one of the girls while they are exchanging corners. The girl tagged before reaching a corner becomes the new "it".

Many variations of the tag-games are now played in schools. Tag-games are very popular among small children (both boys and girls).

Rope-skipping.

Rope skipping.—This is an activity usually indulged in by girls. A girl holds a small rope in front of her body holding the two ends one in each hand. While the girl skips she tries to pass the rope in a circular fashion round the body first passing it in front, underneath both the feet, and then pulling it backwards and overhead and then bringing it once again in front. The movements of the feet and the rope are continuous and the game lasts so long as there is synchronism in the movements of the rope and the feet. The game involves great skill and muscle co-ordination. There are many variations of this game.

Ladder-games.

Nisarṇī or siḍi.—(ladder or "hop scotch").—Games of hopping and jumping through a diagram and playing a stone or puck through it are pretty universal. The diagram which is out lined with a chalk on a pavement or with a stick on the ground differs regionally. The traditional game is played with a *thikari* (flat stone). The play consists of hopping or jumping into different sections of the diagrams and out again in a prescribed manner and order, with or without playing a stone (puck). In all hopping games it is a miss to change the hopping foot.

Child Games

Chanda-Poli.—This game is meant for very small children. The mother or the elderly sister holds one palm of the child and circles her index-finger over it saying *'chanda-poli ghima boli, sau chhokra-ne kakdokori mari-te-Ben-ne, ghima boli, akhi-poli, appa.'* She then carries the palm of the child to its mouth and the game is repeated.

Gaya-gaya.—It is a game meant for very small children. The mother or the elderly sister holds each finger of the child in turn, and says, "this is my *gaya;* this is brother's

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Sedentary games.

gaya; this is sister's *gaya*"; and finally she asks, "where is the calf," and points at the child. Small children enjoy such games very much and they are repeated again and again.

Miṇḍā cokḍi.—Of the sedentary games played by children-one known as *miṇḍā-cokḍi* (naughts and crosses) is very popular. Two contesting players take turns in making a naught or a cross in one of the nine places provided by the diagram, the object being to get the three naughts or three crosses in a row. This row may be either vertical, horizontal or diagonal. Scoer is kept of the games won by each player and of draws.

Kukḍi dāv (pebble toss).—This is a sedentary game girls are much fond of playing at. Round pebbles or stones, or tamarind seeds from five to any convenient odd number are selected and scattered upon the ground by a single movement of the right hand. Of the scattered pebbles, one is selected for tossing. After tossing one pebble, while it is in the air, one of the others is picked up and held in the palm of the hand, and the tossed one is caught in the same hand. In a similar way, pebbles are picked up by twos, threes, fours and so on till all are picked upall at once. The further skill lies in making various movements of the hands while the tossed up pebble is in the air. This requires great co-ordination of the hand and eye movements. An usual variant in the game is to hold the pebbles in the hand, toss them all and catch as many as possible of the pebbles on the back of the hands, again toss the pebbles from the back of the hand and catch all in the palm. If any are dropped it is a miss and the turn is lost.

Major Games.

A number of major games, both of Western and Indian types, are played by the people. Characteristically, Indian major games require small playing area and practically no equipment. Of the Indian major games, the well-known are (1) *hu-tū-tū*, (2) *kho-kho*, (3) circle *kho-kho*, (4) *langaḍi*, (5) *āṭā pāṭa* (6) *gilli-danḍā* and (7) *sat thikri*.*

Hu-tu-tu.

Hu-tu-tū is an outdoor game contested by two teams of nine players each, within a rectangular field of 40' × 30' divided by a central line into two equal halves. Eight feet away from the central line on both its sides are two parallel lines or baulk lines crossing the entire width of the field. Two lobbies each 3' wide run along with lengthwise sides.

Each team alternately sends a raider into the opponents' court to tag or touch the *antis* (opposite players). The game starts with the raider crossing the central line to enter the opponents (*antis*) court, giving out a continuous "*hu-tū-tū*" without

*These games used to be played popularly but irregularly all over the country. Standardised forms were given to them by institutions like the Gujarat Vyayam Pracharak Mandal, which have been adopted in the descriptions.

taking fresh breath. He tries to tag as many of the *antis* he could without losing breath in the opponents' court. The *antis* struggle to detain the raider until he loses breath while he is in their court. If they succeed, the raider is out, but if the raider successfully struggles his way to his court without losing breath, all the *antis* that were in touch with him during the struggle are put out.

Kho-kho.

Kho-kho is a game of chase played between two contesting teams, each of the nine players. There is a rectangular play field of 101' ×51' with a centrally located lengthwise strip of 81'×1' with two wooden posts, each four feet high, fixed at two ends. By toss the teams decide to be the chasers or the runners. Eight of the chasers sit in a row on the mid-strip between the posts equidistantly and with no consecutive of them facing the same direction ; the ninth player is an active chaser. At a time three runners get into the fair field to play, and when they are out the next group of three immediately enters the field. The active chaser moves from post to post along with the lengthwise strip in chase of the runner whom he tries to tag. While chasing he can give a *kho*-signal by a touch of hand on the backside of any of the sitting chaser and make the latter an active chaser and himself sit in the latter's place. If *khos* are given in a quick succession it becomes difficult for a runner to escape being tagged. A tagged runner is out.

Langadi.

Laṅgaḍi.—For a long time this game was being played by boys and girls like an ordinary tag-game, only with the change that the "it" instead of running used to hop while tagging the other players. Gujrat Vyaym Pracharak Mandal, Ahmedabad, framed rules and regulations for the game and gave it a standardised form.Two contesting teams, each of nine players, by toss decide who are to be the defenders or the attackers. The game is played in a circular field of 15 to 20 feet in radius according to the age or height of the players. One player from the attacking side enters the field hopping through a marked entrance and tries to touch and put out the defenders who run or dodge within the boundary. Only three defenders enter the field at a time. The hopping chaser must not, while in the field, touch the ground with any part of the body other than the hopping foot. The game consists of two innings on each side and each inning is of seven minutes' duration.

Gilli-danda.

Gilli-dāṇḍā.— The players are divided into two teams of nine each. The players in one of the teams scatter over the large playing field 650 ft. by 450 ft. The choice of play or field is decided by a toss. A *dāṇḍa* of solid wood 2 ft. 3 inches long and a *gilli* of the same wood 2 to 3 inches thick and tapering at both ends are used in the play. The fielders stand in front of the *bagi* (a small pit dug in the ground) and one of the players pitches the *gilli* kept horizontally over the *bagi* with the help of the *dāṅḍa*. The player is out if the *gilli* is (i) caught off

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(ii) if the *gilli* thrown by the fielder, strikes *dāṅḍa* placed horizontally on the *bagi* or (iii) if any one from the fielding side is able to jump the distance between the pitching place of the *gilli* and the *bagi*. If the player is not out under those conditions he is allowed to hit the *gilli* three times with the *dāṇḍa* after making it rise by hitting it at either end in any direction. Points are scored by claiming the distance covered by 3 strikes to be equal to a number of *dāṅḍas*. If the distance claimed is agreed upon by the fielders the player continues to play. If it is challenged and distance falls short of the claim made, the player is out. The side scoring the agreed number of points first is declared winner. The losers have to pay a penalty. Three chosen players from the winning side strike the *gilli* three times in all and this distance should be covered by fielders by hopping.

There are several variations of this game.

Ata-pata.

Ātā-pātā is a game of feints played between two teams, each of nine players. The play field consists of eight breadthwise strips known as *pāṭis* (trenches), each 23 feet 1 inch long and 13 inches wide, and laid out one after another equidistantly at 11 feet. The first *pāṭi* is called the *kapal pāṭi* and last one the *lopa pāṭi*. A *sur pāṭi* (central trench), 89 feet 1 inch long and 13 inches wide intersects the eight *pāṭis* in the middle to form on both its sides fourteen *cauks* (squares). The space between two consecutive *pāṭis* is called *kondī*. The game begins with the "attackers" who first stand outside the court near the *kapāl pāṭi* trying to dodge and slip through the *koṇḍis* by crossing the *pāṭis* without getting tagged by the defenders who move to and from each of his designated *pāṭi*. If any of the attackers successfully crosses all the *pāṭis* from the *kapāl pāṭi* to *loṇa pāṭi* and makes a return trip from the *loṇapāṭi* to cross the *kapāl pāṭi* a *loṇa* (game) is scored and the game starts afresh. This way they proceed till the time of seven minutes is over. Then the defenders become the attackers.

Sat-Thikries

Sat-thikries is a game contested between two teams of players, attackers and fielders-the one trying to knock from a distance a pile of *thikries* (seven conically arranged tile-pieces), by an overhead throw of a soft ball and the others trying to catch the ball in fly either direct or after the first bounce. Points are scored according to the success of knocking the *thikries* and fielding the ball.

DANCES.

Dances.—Various types of dancing activities, generally of the nature of folk-dances, are current among the people. Some of these dances are connected with the magico-religious belief of a particular section or sect, and as such they are not universal. Some devotional dances are given only by professionals while a few are danced for the mere joy of rhythmic movement.

Rain-dance (*mehulias*).—This form of dance is found among sections of backward communities. At the beginning of the rainy season children tie twigs of *nim* to their person and with an earthen pot go dancing from house to house. They sing songs invoking the god of rains 'Indra' to send rains to the earth so that small insects and animals may not die of thirst. They are given some corn and water is poured on them. They proceed to the outskirts of the village, break the earthen pot and return. The dance is played at the beginning of the rainy season.

Garba-Dance.

Garba-dance.—*Garbās* are played universally by women and young girls all over the district. The dance is performed to the accompaniment of music (instrumental or vocal). 16 or 32 girls move round in circle formation and sing the *garbā* song keeping time with rhythmic claps of hands and stamping of foot. In the course of the movements various formations in pairs and in groups of four are skilfully made and they are particularly seen during important celebrations. Sometimes *tipris* (sticks) are used in the *garbā*. Each girl takes a pair of tipris striking alternately on the right and the left and also adjacent partners striking each other's tipris. There are many varities of the *garbā* dance. *Garbas* are usually played during *Nav-Ratra* (i.e. the first nine days of the month of Ashvin) and *saradotsava* (i.e., 15th day of the month of Asvin). '*Garbās* are also played during *gauri-pujan* i.e., in the month of Ashad.

Now-a-days in many entertainment programmes given by girls one of the items is a *garba*-dance. The professional stage and the cinema-film have to some extent tended to affect the old technique of this popular recreation.

Garbi.

Garbī.—This type of folk-dance is very popular among men-folk just as *garba* is popular with women folk, The movements of the '*garbi*' are similar to the *garba* and so are its formations. *garbi*, however, is more vigorous and has a quiker rhythum as compared with the '*garbā*'.

Ras.

Rās.— This is a variation of the *garba* dance and is played by both men and women. Half the numbermen are dressed up as *gops* and half-women as *gopis*. A small girl or boy is dressed up like Lord shri krishna and stands in the centre of the circle with make-believe imitation of playing a flute. The players move round the circle in pairs (one gop one gopi) with *tipris* in rhythmic movements, the partners striking alternately their own *tipris* and those of their partners. Different dance-steps and formations are used to the accompaniment of music-instrumental and vocal. This form of dance is supposed to have been invented by lord shri krishna' during the days of his early childhood in the forest of Brindaban. There are several variations of Ras.

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Gheria dance.

Gheria-dance:—This is a form of dance indulged in by men-folk of halpatis during nav-ratra, i. e. the first nine days of the month of Asvin. They move round in streets in big cities and *falias* in villages in small groups. Men dress up as women and tie tiny bells round their waists. One of them called the 'Cat' is gaudily dressed up with soot applied to the face and body. The cat indulges in all sorts of childish pranks while others in the dance group dance and sing using *tipris*. They go on begging from street to street collecting alms.

Dobra-dance.

Dobra-dance:—This is a form of dance indulged in by Chodhras in Mandvi taluka in Surat district. Both men and women participate actively in this dance. A huge muscial organ resembling a huge pipe (the-*dobrā*) is played by one man standing in the centre of the circle. Men move round on the outside of the circle holding each other's waist and executing rhythmic foot-steps. Women also move round inside the circle in a similar fashion while the Dobra plays its stimulating music. A set music pattern is sung in chorus by the dancers during the dance.

Lezim-dance.

The formations used in this dance are many and varied. They include the circular formations as observed in *tipri* and *goph*, and other formations like marching in a line in twos, in fours, and then forming different circles going again in a line. This dance admits a variety of vigorous movements skipping, stepping, squatting, bending, hopping, throwing the head up etc. The *lezim* itself supplies the necessary rhythmical music which is often supplemented by beats of *halgi* or *dhol* (drum) and every movement of the dance is performed in unison with the perfectly synchronised strokes of the *lezim* and drum beats. The swinging of *lezim* is done in four or eight counts. The four-count move does not admit the overhead stroke of the *lezim* which the eight-count one does adding more grace.

Tipri and Goph dance.

Tipri and *goph*, are indigenous folk dances known and practised almost all over India. To some extent they are now receiving a new impetus as a part of physical education for boys and girls in primary and secondary schools. The *Tipris* are two tapering pieces of wood varying in size from 1 1/2' to 2'. They may have a bunch of tiny bells fixed at the ends to add a jingle to the sound of the stroke. *Gophs* are strips of cloth attached to a pole or a suspended disc. The *tipris* are held in the hands by their thicker ends by the player. There are generally four or eight pairs participating in the dance. An orchestral accompaniment (*tabla* and harmonium) inspires the dancers to keep better time and adds to the grace of the performance. The dancers stand in a circle in pairs., the two in the pair facing each other. The *tipri* dance could be played without the *goph*, there being no material difference in the movements and formation. But the additionl of *goph* held in the left hand by each dancer adds to

the spectacular effect of the dance. With the progress of the dancing steps in one direction, different patterns get woven out of the *goph* strips which, when the steps are retraced, get unwoven. The dancers dance in various formations, some of which can clearly be discerned in various patterns of the *goph* when it is properly executed. The movements do not vary to a great extent in the different formations. The participants have to strike the *tipris* in unison with the beat of the *tabla* (drum) and move gracefully and promptly in various steps. Generally tiny bells are tied to the feet and wrong timing, if not wrong step, in sure to break the harmony of the dance.

Phudadi.

The *phudadi* is usually played by girls in pairs. Two girls stand facing each other, keep their feet together with a distance of two or three inches between the toes, cross arms, keep them straight and hold each other's hands, balance the body backward, and each time, stepping the right foot a few inches to the right and sliding the left along with it, start in anti-clockwise movement. As the foot work quickens, the movement gathers in tempo till the dancers get swung in a whirl. The dancers sing out recriminatory couplets and blow rythmic breathing sounds with the mouth known as *pakva* to keep time and add zest to the dance.

There are various types of *phudadis. Ekahāth-ni phudadi* is danced while holding only the right hands, the left hands kept resting on the hips. In *lolana phudadi* the players bend the legs and hold the great toes and then start rolling on the back and then sit. In *bhoin phudadi* the dancers start with full squatting position and arms resting on the knees, and then scrap the feet alternately in oblique kicks balancing the steps with backward and forward movements of the arms.

Akhadas or Talims

Ākhāḍās or *tālims* (Indian gymnasiums) have been of old the local centres of disseminating traditional knowledge of various forms of trained physcial activities and culture in the younger generation. They are conducted by *uastads* or *gurus* (trainer-gymnasts) who are much respected by their disciples. An *Akhoda* is often regulated by certain ceremonials, observed with the most scrupulous etiquette. In villages, the Hanuman temple serves the purpose of the gymnasium. A well-equipped *ākhāḍā* may have a building of its own. In its necessary paraphernalia could be included an '*akhada*' (wrestling pit), a *malkhāmb* (wrestler's post), some *jod-jodis* (Indian clubs), hand rests, heavy stone balls and equipments for such physcial games as *lezim*, *lakḍī*, baneti, *dāṇḍpaṭṭā*, etc., and a picture frame or an idol of Hanuman the god of strength. *Dandas* and *baithakas* are the common modes of exercise followed almost religiously by Indian gymnasts and wrestlers with a view to developing big muscles and general strength. The first is essentially an elbowbent and a dipping exercise of the arms and the second is

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knee-bent effected by squatting and standing. *Kusti* (wrestling), at which Indians exhibit great skill and activity, has four traditional schools known according to the nature of the holds used by the wrestler to defeat his opponent. In the *Bheemseni* a high degree of strength is required for the hold while the *hanumanti* emphasises the specialised skill in it. The *jambawanti* was a perfect technique of interlocks and in the *jarasandhi* holds grave injuries such as dislocation of fracture etc., are aimed at. The *jod-jodi* or *mudgul* and the *lezim* exercises are practised to develop the strength of arms and shoulders. *Malkhāmba* exercises which have now developed into a specialised art were in their orgin meant to train the wrestler in agility, balance and firm grip of hands and legs.

BACKWARD CLASSES

The backward classes in the district consist of three distinct groups-(*i*) the scheduled castes or *harijans*, (2) the scheduled tribes, and (3) the other (unscheduled) backward classes.

The scheduled castes comprise those formerly labelled as untouchables. The Indian Constitution of 1950 has abolished untouchability in all its forms. Several state gorvenment have also passed enactments whereby these communties can no more be refused entry in temples open to other Hindus, and discriminated against in hotels and eating houses.

The scheduled tribes are the *adivasis*, or aboriginal inhabitants. Because of the close contact of centuries with the caste Hindus, the animistic religion of these people has taken over so many features of Hinduism. Though no stigma of untouchability has applied to them they were and are economically and educationally backward.

The unscheduled backward classes, which are known as the other backward classes in Gujarat state, consist of those castes which though neither scheduled caste nor scheduled tribes have remained economically and educationally backward.

The population of the backward classes in Surat district which in 1951 was enumerated for the scheduled castes and Scheduled Tribes only, was 9,72,691 or 53.2 per cent of the total population. Of these the scheduled castes which consisted of communities known as depressed classes such as *bhangis*, *khālpā*, *nadia*, *vansphoḍa*, etc. numbered 1,18,286 (*m*.55,604, *f* 62,684); of which 1,00,474 (*m*. 46,278,; *f*. 54,196) lived in the rural area, and 17,812, (*m*. 9,326; *f*. 8,486) lived in the urban area.

The scheduled tribes are mainly the primitive and forest tribes known as *adivasis* or *raniparaj*. In this district they are *bhills*, *chodhrās*, *dhodias*, *dublas*, *gāmits*, *kāthodias*, *konkṇās*, *kolis* (dhor), *naikas*, *vasavās*, and *vārtis*, with a total populations

of 8,54,405 (*m*, 4,27,158, *f*-4,27,247,) persons, 8,11,622, (*m*, 4,05,542, *f* 4,06,080) being in the rural area and 42,783 (*m*. 21,616,; *f* 21,167) in the urban area.

Population.

In the following pages are described in some detail the customs and manners of the *bhangio*, the *mahyavanshi*, the Nādia, the *rohit* and the *vitholia* from the scheduled castes, and the *chodhrā*, the *Dhodiā*, and the *dublā* from the scheduled tribes.

Bhangio.

In the Gujarat State the term *bhaṅgī* has become a synonym for scavenger and is applied to any one engaged in that work. The community of *bhangias*, therefore, consists of several endogamous divisions such as (1) gujarāti, (2) saurāṣtri; (3) lālbegi (migrated from Rajasthān) (4) paradeshi (migrated from Uttar Pradesh); (5) kerar (coming from Mysore); (6) malkānā bhaṅgī; and (7) sheikh bhaṅgī. The Surat bhaṅgīs as indigenous to Gujarāt are known as *olgaṇā* or *rukhī* (sanskrit for *Ṛūṣī* or sage), numbering 1964 (*m*. 1007; *f*. 957) in Surat district (1941).*

Bhaṅgias speak Gujarāti, and understand Urdu. They are bound together by a strong caste feeling and have their headman called patel or *mukhi* and *panch* (elders) to settle social disputes. Breaches of caste rules are punished by forbidding the offenders the use of water and fire, and the offenders are readmitted into caste on paying a fine. In Gujarat, though Bhangias are held to be low and unclean, they are viewed with kindly feelings. To meet the basket-weaving Bhangia is lucky and the Bhangia's blessing is valued. They respect god Rāmpīr as well as goddesses Kalkā and Aṁba. Many are the followers of Kabir, Rāmānand and Nānak. Some are *lālbegīs*, that is, disciples of the Musalman saint Lālbeg.

Birth.

Chatti is observed on the sixth day or earlier after the birth of a child. On that day, rahi randalai is represented by a circle drawn with *kuṅku* at the site of the child birth or by small heaps of grains and worshipped. The child is named on the day and its mother goes to a river or a well or usual water source bows to it and fetches water from it.

Marriage.

The offer of marriage comes from the bridge's or bridegroom's father, and the proposals are carried through an intermediary known as *panchatiā* or *bhanjgaḍiā* . A family elder (husband of the bride's elder sister) or a Garoḍa Brahman officiates at the ceremony. Marriage in the same family (surname) or with nearest kin including mother's brother's, mother's sister's, father's sister's, or sister's daughter is not allowed. The custom of paying *dej*† (bride-price) is current, the amount varying from Rs. 100 to 300.

* The latest community wise census figures are available for 1941 only.

† The paying of *dej* (or any other monetary consideration) is now prohibited by an act of the Central Legislature.

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Marriage.

Prior to the marriage day, the persons of the bride and bridegroom are besmeared with *pīṭhī* (turmeric powder), the women singing and making merry. The marriage pandal with one of its posts of khijaḍā is constructed. On the marriage day, at the entrance of the marriage pandal, the bridegroom is received by the bride's mother who touches him with a bundle consisting of toy pestle, arrow-head, churning rod, etc. The boy and the girl are then seated in the *chori* (central square) of the marriage pandal, facing each other, and between them a *homa* fire is lighted. The person who presides over the ceremony throws rice grains over the couple, places the bride's hands into the bridegroom's hands, ties into a knot the ends of the garments of the couple and the couple make five rounds round the *homa* fire. The couple then feed each other with *kansār*. The tying of the knot is the binding portion of the ceremony. Later on the bride wears bangles made of ivory as an emblem of marriage.

They allow divorce as well as widow remarriage. A widow may marry a younger brother or any other member of her deceased husband's family if she chooses to do so. There are no rites in widow marriage. A bachelor can marry a widow.

Funeral.

They bury their dead. On way to the burial ground at *visāvā*, the chief mourner keeps a *lāḍu* (sweet-ball) and a coin, and in the burial ground, a *tulasi* leaf on the lips of the deceased. Thereafter the deceased is lowered into the grave and buried in a sleeping posture with its face facing the heaven. When the grave is filled up, the chief mourner moves round it four times with a holed earthern pot of water and at the fifth round crashes it and shouts *abābbā*. On returning home, after a plunge into water, the mourners eat a morsel of food and spit it. Later, on the third day, the chief mourner goes to the burial ground and keeps near the grave a *lāḍu* and an earthen pot of water. This is repeated again on the twefth day, and some families bring twelve earthen pots of water at the site where the deceased had breathed his last. This done, the chief mourner winds thread round the pots and worships a ball of dough in the name of the deceased. Thereupon, everything is collected and placed at the village boundary.

Condition.

Bhangis stand very low in the Hindu social scale associated as they are with the lowly work of carrying night-soil. Their hereditary occupation in villages is sweeping, basket-making and dragging away dead dogs and other animals except cattle. In towns their lot is to clean roads and latrines. In fact scavenging has become their monopoly, and in that capacity both male and females get ready employment in *panchayats* and municipalities. But in villages to augment the insufficient income from the small patches of land they possess they have to sweep, beg and supply baskets to agriculturists in return of grain or cash. Many have migrated to towns and cities in search of scavenging. There, because of ignorance and spendthrift habits they run into heavy

indebtedness. They have remaind very backward in education. One of the reason why *bhangi* children cannot take the advantage of educational facilities is that they have to look after the youngsters, both the parents being out for work.

Mahyavanshis.

Mahyavanshis, numbering 21,127 (*m.* 9,381 *f.* 11,746) in Surat district (1941), now prefer to be known as 'the descendents of Māhya * (sage) as the name suggests, than as the *Dhedas*, a derogatory term used in the past. Where they follow weaving as their main occupation, they are called vaṇkars. Of the several endogamous divisions among the community those of Surat are known as surtis. They have no subdivisions, but a recent section consisting of religious devotees has started styling itself *'Nava'* (new). Except that they are darker, the māhyavanshis in complexion and figure, are much like kolis and kanbis. The men shave the head, leaving a tuft of hair on the top, and wear a thin moustache. Some, particularly the surtis, wear a heavy moustache and whiskers, and arrange the hair of the head in European fashion. The bulk of the men are ill-clad, a few better-off wearing items of European dress. A well-to-do *māhayavanshi* woman wears a full robe and a bodice equalling in fineness and price with those worn by high caste Hindus. They speak corrupt Gujarāti.

Various surnames, exogamous in nature, are current among the community of which some are; *āchārya,* bāvā, bhcraviā, chauhan, dholakia, gosai, mahant, rāṇā, vaghelā, etc. Their social organisation headed by a *patel* formerly called *mehtar*, now functions but loosley. They observe festivals and respect gods and goddesses as all other Hindus.

Birth.

They observe *chatti* on the sixth day in case of a male child and on the fourth day in case of a female child. On this day, in some places, small heaps of rice grains are placed under a rafter of the house and near an iron rod placed on *piplā* leaves, and the rod as well as heaps are worshipped in the name of the goddess.

Marriage.

Marriages are celebrated in the usual manner current among other scheduled castes in the district. At the time of marriage, the bride and the bridegroom sit near each other and a *garoḍā* priest who presides over the ceremony throws rice-grains over the couple, places the bride's hands into the bridegroom's hands, tics into a knot the ends of the garments of the couple and asks the couple to move five times round the *homa* fire kindled by him. Later the bride wears bangles of elephant tusk as emblem of marriage.

Divorce as well as widow marriage are allowed. The widow-marriage is performed at night at the woman's place.

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*Mahya, as a legend says, offered himself as a victim to stop the leakage of water from great Sahasrarjuna Tank built by King Sidhartha of Patan.

Funeral.

The dead are either buried or cremated in the usual way followed by other scheduled castes in the district. On the third day, the chief mourner visits the cremation ground, collects ashes into a heap and keeps an earthen pot of water above it, with a *lāḍu* over its mouth. On the twelfth day, or later, funeral rites are observed and a garoḍā priest is invited to conduct the rites. Twelve earthen pots and two earthen pots called *karoḍā* are brought and placed under a cot, which is covered with a cloth. The chief mourner worships the cot and the pots in the name of the deceased as per instructions of the priest. He also worships a ball of cooked rice in the name of the deceased and divides it into four portions. Thereafter, it is immersed in river or tank water.

Condition.

The hereditary occupation of the *mahyavanshis* is village service including skinning of dead animals and weaving of coarse cloth. These occupations are still followed by more than 75 per cent of the community. Among agriculturists in the community more than 60 per cent are labourers, while the percentage of landholders is 20. The latter include the holders of *pasayata* lands granted to the community for village service. This community is exploiting all possible avenues of maintenance and some persons from it are found working as butlers and drivers in Bombay, as labourers in weaving mills, as tailors, and hotelkeepers, while some prepare baskets and winnowing fans of bamboos, ropes and brooms from *sīndi* leaves and rear cattle.

Compared with other Harijan communities in Gujarāt this community has made great progress in education.

Nadias.

Nadias who number 307 (*m.* 156; *f.* 151) in Surat District (1941) are found mostly in Surat city and other towns and do the work of sweeping the roads in municipalities. It is said that formerly this community had to drag dead cats and dogs from villages where a local Bhangi was not available. However it considers itself socially superior to *bhangi* but inferior to *mahyavanshis*.

They have got exogamous divisions called *kuls* which include such names as, chuḍāsāmā, cauhān desai, jādav, makwānā, patel, parmār, rajput, raṭhod, etc. Their social organisation is headed by *metar* or *patel* and the *panch*. They respect all Hindu gods and goddesses but specially the god Rāmpir. They have also *ramānandi* and *mulagami* sections.

Birth.

When a child is born its umbilical chord is cut and buried in a heap of rubbish. On the sixth day *Chhaṭṭī* is observed and a *ghee* lamp is lighted. Later the child is named on any day.

Marriage.

The community does not permit marriage in the same *kul* or with mother's sister's, mother's brother's, father's sister's and sister's daughter. The custom of bride-price is current in the community and varies from Rs. 50 to Rs. 250 as per regional

usage. The marriage ceremony is conducted by a garodā priest and follows the usual pattern current among the Scheduled Castes.

Divorce and widow marriage

The community permits divorce as well as widow marriage and allows a widow to marry a younger brother of the deceased husband. Any other persons desirous of marrying her has to pay Rs. 50 to 100 to her parents. There are no rites in widow marriage. But in some places a garoḍā priest may tie into a knot the garments of the couple. The community permits a bachelor to marry a widow after undergoing marriage ceremony with a doll in some places.

Death.

The community buries its dead. In the burial ground, the face of the deceased is washed with water poured over it by the mourners and an earthen lamp is "shown" to it before it is lowered into the grave. On the third day, or the fifth day, the chief mourner worships balls of cooked rice in the name of the deceased as per instructions of a garoḍā priest.

Condition.

The community has become conscious of the importance of education and is now sending children to schools. Some of the educated persons are found in service as teachers, clerks, peons and police and in Railway as *mazdoors*. Being a labour community its economic condition is poor and its problem is to find an avocation that will enable it to carry on its existence. Besides, the problem of avocation, it also faces the problem of untouchability like other untouchable communities of Gujarat.

Rohits.

Rohits also known as *camār*, *camadias*, *chaḍias*, and *khālpās*, number 3,056 (*m*. 1,453; *f*. 1,603) in Surat district (1941). They are a community of tanners and workers in leather and are said to have originally sprung from a Rajput ancestor and a low caste woman.

The community has many surnames, such as; Chāvda, Chouhān, Dabhi, Dāntia, Gohel, Jadhav, Panḍiā, Rāvā, Saloza, Vismia, Zālā etc., and is subdivided into territorial beats called *gola*. These *golas* are further subdivided into *chorā*, a circle consisting of twenty to thirty villages. Each *chorā* is presided over by a patel, who is the social head of the *chori*.

Birth.

When a child is born, its umbilical chord is generally cut with *rāpā* (an instrument used in leather work) and is buried in the court-yard. On the sixth day *chaṭṭi* is observed and the child is placed in a *supḍu* (winnowing fan) and small heaps of rice grains are placed near the fan in the name of the goddess or a *ghee* lamp is lighted near the *pāṇiyāru* (water stand). On the same day or later the child is named preferably by its paternal aunt. After one and a quarter month the mother visits a well or usual water source, bows to it, and fetches water from it.

Marriage.

The offer of marriage comes either from the bride's or bridegroom's father. A marriage is settled with the help of a casteman

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styled *vastālio* or *kārbhāri*. Marriage outside the *gola* and with the nearest kin, including mother's sister's, mother's brother's, father's sister's and sister's daughter is not allowed. The bride's father receives from the bridegroom's father *dej* or *pallo* (bride-price) which varies from the Rs. 50 to Rs. 350 as per regional usage. Prior to the marriage day, the persons of the bride and the bridegroom are besmeared with *pithi* and on that day, marriage pandal with one of the posts of *rāmaḍi* of *gugal* is constructed. The marriage takes place at the bride's house and the bridegroom goes there in a procession, holding a dagger or sword or at least a betel-nut craker in his hands. When he arrives at the entrance of the pandal, the bride's mother presenting him a bundle consisting of *arā* (needle for sewing shoes,), churning-rod, toy pestal and lump of earth leads him to the marriage hall. She also offers him jaggery, pieces of coconut kernel and *dhānā* seeds. At the time of marriage, the bride and the bridegroom sit near each other and a *garodā* priest who presides over the ceremony throws ricegrains over the couple, placesthe bride's hands into the bridge-groom's hands, knots the ends of the couple's garments and ask the couple to move seven time round the *homa* fire kindled by him.

Divorce.

Divorce as well as widow marriage are allowed. A widow can marry a younger brother of the deceased husband. Any other persons desirous of marrying her has to pay Rs. 40 to Rs. 300 as per regional usages. The widow marriage is performed at night at woman's place and may be attended by a *garodā* priest. There are no rites in widow marriage except that the end of the garments of the couple are tied into a knot, and the heads of the man and the woman are knocked against each other. A bachelor is allowed to marry a widow, in some places after undergoing marriage rites with a doll.

Funeral.

They cremate or bury their dead. In the cremation ground the bier with the deceased is moved five times round the arranged pyre and the deceased is placed on the pyre. It is then lighted by the chief mourner. The ashes from the burnt pyre are collected either on the same day or on the third day and immerged in water. On returning home, after a plunge into water all the mourners take a mouthful of water and spit it. At night, the chief mourner keeps a lighted earthen lamp at the site where the deceased had breathed his last. On the twelfth day or later funeral rites are observed. On that day, a priest from the *garodā* community is invited and the chief mourner worships balls of cooked rice in the name of the dead as per instructions of the priest. The mourners, thereafter, one by one pour water over the balls which are soon immerged into water. This over, a lamp of dough is lighted and near it one earthen pot of water is placed with a sugar-cane stick planted with a garland of flowers hanging from it above the lamp. The chief mourner worships the pot and sees that the lamp does not fade out in the night. On the following day, everything is collected and placed outside the village boundary.

The hereditary occupation of *rohits* is tanning of hides and is still followed by more than 60 per cent. of the community. Besides they have taken to leather work namely making of leather baskets and ropes, mending as well as preparing shoes, chappals, leather bags etc. Some live by preparing brooms and ropes from *sindi* leaves, trading in bones, tailoring, stove repairing, working in mills, while a few are employed as cooks and house servants especially by persons in Bombay. A few persons of the community from Surat district have migrated to Africa, Fizi, Zanzibar, Singapore and Newzealand.

Rohits are one of the essential village communities and consider themselves superior to all other untouchable communities except *garoḍā*. They are conscious of their social rights as well as of the importance of education and are taking advantage of educational facilities.

Vitolias.

Viṭoliās, also known as baroḍiā or wansfoḍa, are found in small number in Bāsḍa and Dharampur *talukas* of Surat district. They are so called because of their hereditary occupation of splitting bamboos and weaving of baskets out of it. (Weaving of bamboo is known as *vatalvo*, and *wanfoḍa* means splitting on bamboo). They speak a dialect of their own, which is based on Gujarāti and is crisp. They mostly live either near a forest or at a place where they can get an easy supply of bamboos. Their women are easily marked out by their dress, and ornaments consisting of *chitaryas* (necklaces of white shells), brass armlets and *vāḷās* (anklets).

They have exogamous divisions called *kul* of which some are: sadari, desai and chaudhari. Like other tribals they are fond of dancing which includes dance types known as *dohedịā, bavāḍia, paraniā,* etc., danced to the tune of *dobadi* flute. Their social organisation consists of *kārbhāri* and *panch* (elders). The community believes in black magic and witch-craft, and make offerings of goats, fowls, and liquor (in pre-prohibition days).

Birth.

When a child is born its umbilical chord is cut with a *boru* (reed) chip, and buried outside the hut and a stone is kept over it. On the fifth day (*pāchorā*) is observed and five small grains placed near the stone over the chord or the site of the child birth, are worshipped in the name of the goddess. When the child grows old, its hair are clipped by its paternal uncle and thrown near a shrub.

Marriage.

The offer of marriage comes from the boy's parents. If it is not accepted,. bride-price (*dej*) which varies from Rs. 40 to 140 is settled and the bride is offered a black thread for knitting the hair, a comb for hair, a *saree* and a *choli* (blouse). Marriage is celebrated at the bridegroom's place and the bride goes there

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in a procession. On arrival she takes her seat near the bridegroom, sitting near *ukhal* (rice-husking block). The bride and bridegroom exchange leaf-cups filled with tea (instead of liquor). This over, their garments are tied into a knot and they are taken out for participating in a dance. Two dancers lift the couple on each shoulder separately, and dance five times round the courtyard. Later, the couple is led inside the hut and the ends of the garments unfastened, they participate freely in dancing.

At present, in some places, especially in Bārdoli taluka, vitolias follow marriage rites such *pithi*, *mandvo*, touching the bridegroom with a bundle consisting of toy pestle, churning rod, etc. as in other communities. After marriage, the vitolia bride wears necklace of *citaryā* shells and brass *Vāḷā* on legs and arms. In case a boy is unable to pay the bride-price, he marries according to *khandālia* system, serving the father-in-law for five years in lieu of *dej*.

Divorce

Divorce and widow marriages are allowed. The tribe permits widow marriage and also a widow to marry a younger brother of the deceased husband. Any other person desirous of marrying her has to pay Rs. 30 to 35 to her parents. There are no rites in widow marriage, except exchange of leaf-cups filled with tea by man and woman to each other. In some places, especially in Bardoli taluka, rice grains are thrown over the couple at this time.

Funeral.

The dead are buried ; the funeral rites are the same as followed by other scheduled castes in the district.

Condition

Vitholias are mainly engaged in preparing baskets, winnowing fans and other articles of bamboo. Their economic condition is poor and they live from hand to mouth. In Surat district though they were treated like an untouchable community, they resemble more a tribal community then a scheduled caste. Educationally they are very backward.

Codharas.

Codhrās, who appear to be one of the aboriginal tribes of Gujarāt, are mainly found in Surat district where they number 19,082 (1951). According to their tradition the tribe has migrated from north Gujarāt. Their women can be easily recognised by their red-striped *saris* reaching up to the knees. In former days, the women used to wear *kidiā* (necklaces of black and red glass-beads) and *kākan* (wristlets) of brass, ringlets on the *ambodā* (knot of hair at the back), and thick rings of brass called *katāriā* on the legs. The tribe speaks its own crisp dialect, based on Gujarāti.

They have three endogamous divisions, namely, *pāvāgaḍiā* Nalādri and Vālavdā, of which, the Pāvāgaḍiā claims social

superiority over the other two. They are further sub-divided into nine exogamous divisions called *kuls* ; *bāmānia, dharāt, kaṇabi, rajput, raveliā, vālvi, vashi, hajarniā* and *desai.* Their social organisation headed by *kārbhāri* and *panch* has now become loose. In former times, the *kārbhāri* used to preside over the purification ceremony of an offender who had broken tribal rules.

Religion.

Codhrās, worship their own deities, namely *kākābālio* (small pox goddess), *bhavāni* and the boundary gods *pālio, simario* and *naderio.* Stone images of ancestors known as *khatrans* are installed under trees, and small earthen domes are erected over them by those who can afford it. Offerings of goats and fowls are made to gods, part being received by the offerers, part by the worshippers. They believe in black magic and witch-craft and in the efficiency of the *bhagat* to ward these off. Vows are of two kinds, *cokhli* (clean) and *meli* (unclean). In the former the deity is worshipped with reddened rice, milk and a *ghee* lamp and in the latter with the killing of a cock or a goat; its blood (and formerly some liquor) being poured over the idol. Like other tribals chodhras are fond of dancing to the accompaniment of *dobadu* (flute) and *zānj* (brass cymbals). Both men and women participate in these dances.

Birth.

When a child is born, its umbilical chord is cut with a *boru* reed or *darbha* grass blade, and buried in a cattle shed or under a *bor* tree. On the fifth day *pachorā* is observed and the child is named by its maternal uncle. On this day, one or five small heaps or rice grains are placed in the name of the goddess and worshipped. When a child grows old, its hair are clipped by its maternal uncle who is paid a coin or a chicken for the services.

Marriage.

Marriage in the same *kul* or with mother's sister's, mother's brother's, father's sister's and sister's daughter is not allowed. The custom of *dej* (bride-price) is current,* its amount varying from Rs. 45 to Rs. 125. The offer of marriage comes from the boy's parents and if approved *dej* (bride-price) is settled. On this occasion the boy and girl are offered leaf-cups filled with tea (instead of liquor as in former days) and are asked to exchange their leaf-cups if they approve of each other. This is the main rite followed later by the *lagan.* Prior to the *lagan* day the persons of the bride and the bridegroom are besmeared with turmeric powder by *Umar* leaves and a pandal having one of its posts of *kakad* tree is constructed. The *lagan* is celebrated either at the bride's or the bridegroom's place. When the bridegroom arrives at the entrance of the pandal, he is obstructed by the bride's party by holding a bamboo across his path, till a present is given to the party. Thereafter he enters the house and takes his seat near the bride who is sitting near at *ukhal* (block of pounder). There, the bride's sister ties into a knot the ends of the couple's garments, and the couple is rubbed

*Now prohibited by law.

with turmeric powder. On this occasion the bride and bridegroom offer food to each other. This done, a necklace of black glass beads is fastened round the bride's neck and the bride and the bridegroom are led to the threshold where they move four times across it throwing rice grains over each other. Later, the couple goes inside the kitchen and moves four times round the *chulā* (oven). At the end of each round the ends of their garments which are knotted are undone and again fastened. Thence, the couple comes out in the pandal and is lifted by two dancers each separately on their shoulders for dancing. In case, a boy or his father is unable to pay the bride-price, the boy agrees to serve his father-in-law for a fixed period in lieu of the *dej*. At the end of the period, the boy is married to the girl at the expense of the girl's father.

If a youth takes a liking for girl and elopes with her the couple is fined and now-a-days made to undergo *lagan* rites. The children born to such a couple are not looked down upon and are not prevented from marrying into the tribe.

Divorce and widow Marriage.

Divorce is allowed. As a sign of separation the *panch* tear an end of the woman's *saree*. In case a woman leaves her husband and lives with her paramour without obtaining prior divorce, the latter is fined by the *panch* on a complaint from the husband. A part of the fine is paid to the husband as compensation and thenceforth the husband waives his right over the woman. But such cases are now rare. They also permit widow marriage and allow a widow to marry the younger brother of the deceased husband. Any other person desirous of marrying her has to pay Rs. 30 to 65 to her parents. The widow marriage takes place at night at the woman's place. At the time the necklace of black glass beads is first fastened to a *rui* shrub and turmeric powder is rubbed to the persons of the couple. Later, the woman wears this black glass bead necklace as emblem of marriage. They allow a bachelor to marry a widow.

Death Ceremonies.

The dead are either cremated or buried. Before the corpse is carried away from the house it is bathed, covered with a new shroud and a coin is placed over its lips. On way to the cremation ground, the son of the deceased or in his absence the nearest male relative keeps a small stone, lump of cooked rice, *davali* (dried bottle-gourd used for drinking water), corn-ears of *maka* and a pice at the *visāvā*. The bier with the deceased is moved round the pyre or the grave four times and lumps of cooked rice are thrown in four directions, and one lump of cooked rice is kept over the lips of the deceased. Next, the chief mourner pours water over the lips of the deceased and buries or cremates it. This over, an axe-blade is thrown five times across the grave or the burning pyre and the chief mourner moves five times round the pyre or the grave with a holed earthen pot of water over the shoulders. Thereafter, all go for a plunge into water and on the bank of the river or tank place the axe-blade fastened

with a piece of shroud of the deceased. On this blade *darbha* grass-blades, saplings of *umbar* and *jambhul* along with an ignited ball of cow dung are kept, and the mourners pour little water over the axe. Later, the chief mourner fills two leaf-cups of *palas* with tea and drops *sak* from them in the name of the deceased. On that day or the following day he collects ashes from the burnt pyre and immerses them in the river or tank water. This done, he constructs at the site of the pyre a miniature shade of *darbha* grass-blades and keeps under it an earthen pot of water, with a lighted earthen lamp and four leaf-cups of *Palas* containing lumps of cooked food. Next, he keeps four leaf-cups containing lumps of cooked food at the four corners of the site of pyre, one leaf-cup containing food at the head of the pyre, one in the middle and one at feet of pyre. Thence, all return to the house of the deceased and there they are sprinkled with water in which live charcoal is immersed. At night, the chief mourner keeps a lighted earthen lamp along with water and food at the site where the deceased had breathed his last. On the third day or twelfth day *khatran* (a small stone slab) is installed in honour of the deceased. This slab is selected by a *ghumaro* in whom the spirit of the deceased enters on the day. When he draws a figure on it and utters the names of all the dead in the family, the assembled women start weeping in a low voice. Then, the *ghumāro* is offered a pice by each mourner in the name of the deceased and the slab is carried to the site where all the old slabs stand. There, the chief mourner installs the new slab, worships it and sacrifices a hen in its honour. From thenceforth on all festivals the new slab is worshipped along with the old ones as deified ancestor, and a lump of cooked food is placed on the roof of the hut as well as near the *chulā* (oven) in the kitchen in the name of the deceased.

Condition.

Codhrās, are a good agriculturist tenant tribe and depend mainly upon agriculture and forest for their living. However, due to uneconomic acreage available for cultivation, it is not able to have sufficient income and at times they are forced to borrow from *sahukars* or landlords. A few persons of this tribe earn their livelihood as tailors, carpenters, masons and grocery shopkeepers. They are conscious of the importance of education and are taking advantage of it. They have a few matriculates and a few who have passed the vernacular final examination. The latter category includes a few girls.

Dhodias.

Dhodiās who are found in the district of Surat number 93,576 (*m.* 46,546 ; *f.* 47,030) in (1951). Their women can be easily recognised by the way in which they wear *sāris* (robes) reaching up to the knees and *choli* (blouses) with strings tied at back. In former days they used to wear a number of *kadakis i. e.* brass wrist-lets on lower arms and *vala* ringlets of brass on legs. The tribe claims Rajput descent and states that their ancestors were Bhana and Rupa Khatri (Kshatriya) who fled from north Gujarat during

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BACKWARD CLASSES Social Organisation.

Mohammedan invasions. They have their own dialect- based on Gujarati.

They have served exogamous divisions called *kuls* some of which are *bāmānia, garāsiā, (motā), garāsia (nānā), bhatada, nāyaka (nānā), nayaka (Nānā), hupasari, desai, vanjāriā motā), vanjāriā (nānā), valavi--garāsiā, Lın garasia,* Kata- garāsiā, *sargia, bandalia, beglania, kodravia, madan-garasia, bubalia, dang-fayadia, Suta-garasia, bovisia, thakaria, narvima, panoria, ucha-bayadia, panchbaidiya, chobodia, atara, thakur-garasia,* etc. Their social organisation consists of a patel, his assistant (*kārbhāri*) and *panch* (elders). *dhodiās* consider themselves socially superior tc other tribes and in consequence any person of the tribe who breaks tribal rules or commits sexual indiscretion with other tribes has to undergo purification, which consists of the offender walking through seven shades erected on a river bank. As soon as the offender enters one shade, it is kindled and he jumps into the river and enters another shade and so on. Next, he is asked to drink water mixed with cow's urine and cow-dung.

Religion.

Dhodias follow the Hindu law of inheritance and are animistic in religion. They offer worhsip to bharam dev, iria dev, divali goddess, kakabalia, maoli mata, sivardev, etc., with a belief that as their devotees they are protected from the affection of witches, ghosts, small-pox and cholera. They believe in black magic and witchcraft, and have a number of *Bhagats*, in their ranks who thrive on treating persons believed to be affected by blackmagic and witchcraft. They visit the shrine of samradev (brahmadev) at rudvel in Chikhli taluka. *Divaso, vag baras, diwali* and *holi* are their leading holidays. They prepare images in wood of their dead-ancestors which are termed *bhatada*, or *khatra*, and worship and make offerings to them through a *bhagat*, or *bhuvo*. They do not employ Brahmans for conducting their religions and ceremonial affairs.

Customs regarding birth, marriage, and death among *dhodias* are practically the same as those among *codhrās*.

Dhodias are good agriculturists and more than 75 p.c. of them live by agriculture. Of these in Surat district more than 50 p.c. have their own lands and 25 p.c. are tenants, though this status may change as a result of the recent tenancy legislation passed in the State. They are industrious and work also as forest labourers. Some ply carts for transporting timber, some serve as *gumastas* under forest contractors or in shops, while a few run their own grocery shops, hotels, and tailoring, smithy and carpentry shops. They are conscious of the importance of education and are taking to it. A few graduates, matriculates and some who have passed the school final examination are found in their ranks; even some girls have passed the matriculation.

BACKWARD CLASSES
Dublas.

Dubḷās, chiefly found in the districts of Broach, and Surat number 1,65,701 (1951) in Surat District. The tribe has two main endogamous divisions, *viz.*, (1) *dublās;* (2) *talāviās.* The *dubḷā* division is found in Thana ; those of Surat and Broach are mainly *talāviās.*

Talāviā dublās call themselves *talāviā rathod* or *halapati,* and consider themselves as the highest in social rank among all the sub-divisions of the *dublas.* However, they are classed among the *kaliparaj,* i. e., dark race, a common term in general use for the aboriginal tribes of Gujarāt. Their social organisation is headed by a *karbhāri* and *panch* (elders).

Religion.

Dubḷās (*talavia*) follow the Hindu law of inheritance. They are animists by religion and believe in witchcraft, sorcery and magic. Besides spirits and ancestors, they worship Hanumān and differenct forms of goddesses such as *kākābaḷiā, shikotri, melaḍi, jogan,* etc. Every community has a *Bhagat* (sorcerer) who cures diseases by means of a broom made of the leaves of the *nimb* tree. Under the influence of a spirit he nods his head and directs the performance of certain rites to free the patient from his troubles.

Offerings of goats, fowls, etc., are made to goddesses during *Navrātra* (nine nights festival) in Āso. Stones and holy trees, especially the tree *samer,* which is believed to be the haunt of ghosts, and the *shami* are worshipped. Their leading holidays are *natvi athem* in *aso, holi* in *Phagan, divāli* in *Aso, makar sankrat* in *Paush, divāso* in *Ashādha* and *balev* in *Shrāvana.* The *divāso* holiday is specially observed by them. On that day they make dolls and puppets and marry them. During the *navarātra* they dance the *gheria* dance, collect subscriptions from the public and spend the money on merry making.

Customs regarding birth marriage, divorce and death among *dublas* are practically the same as those among *codhras* and *dodiyas.*

Condition.

dubḷās (both the sections) live mainly by agricultural labour. They are proficient in cultivation and were employed in former days as tenants. At many places they are a poor indebted tribe. The young and the old used to work formerly as *hali* at the house of the landlords to wipe off their ever-increasing debts, incurred during days of unemployment as well as for marriage, *davā* (medicines) and funeral. Another problem facing the tribe was that their huts were located in the fields of the landlord which enabled the latter to threaten them with eviction whenever they ceased to work for the landlord. This problem is now being solved by the Government by organising *halapati* housing societies and by resorting to tenancy legislation.

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Parsis, according to the 1951 Census, are returned as numbering 14,590 (*m.* 6,702 ; *f.* 7,888) in the district of Surat or 0.79 percent of the population. About 4,891 Parsis lived in rural areas. and 9,699 in urban areas, Surat city alone accounting for 3,858

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PARSIS. History

The ancestors of the present Parsi community of India came from Persia, with which India had relations from very early times. There are grounds to believe that the ancestors of the modern Parsis when they came to India at the fall of the Sassanian Empire before the onslaught of the Arabs, came to a country, not unknown to them, at least by name and fame.

According to a poetic account known as the Kisseh-i-Sanjān * after the Arab victories at Kadesia (A. D. 638) and Nahavand (A. D. 641), the kingdom of Persia having passed from Shah Yazdezard, the Persians who stuck to their old faith led a hard life for a hundred years hiding themselves in the hills; then they moved to the coast and settled in the city of Ormaz. After they had been in Ormaz for fifteen years the enemies of their faith again troubled them. Following the counsel of a learned priest to leave Persia they set sail with their wives and children for India and landed at the island of Diu on the south coast of Kathiawar. They stayed at Diu for nineteen years, and again on the advice of an aged priest they set sail for Gujarat. Overtaken by a storm in the way they anchored at the safe shore near Sanjan. There they were given permission to choose a spot and settle by Jadi Rana, apparently a Yadav chief of south Gujarāt, on their agreeing 'to learn the language of the country, to make their women dress like Hindu women, to cease to wear arms, and to hold their marriages at night.' A temple for the holy fire of Behram was begun and by the help of the Hindu chief was soon finished (790 A. D.). The Parsi settlement at Sanjān, with the management of its affairs in the hands of the faithful, soon prospered.

For about 300 years most of them seem to have remained at Sanjān, though a few dispersed in various directions, going to Vankaner, Broach, Variāv, Ankleshwar, Cambay and Navsāri. In another 200 years the dispersion seems to have been complete. Some houses of Dasturs with some laymen remained in the city of Sanjān and the rest of the priests dispersed with the laymen to different parts of Gujarāt. In order to avoid differences in future, they amicably fixed five‡ territorial limits known as Panthakas within which different priests were to carry on their sacerdotal work (A. D. 1290).

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*This traditional account of the emigration of the Parsis from Persia to India and their settlement in the various parts of the country was written about A. D. 1600 by a priest named Beharam Kekobad Sanjana of Navsari in Persian verse, and is translated in English in B.B.R.A.S. Jour. I,167-191.

‡The five divisions are as follows :—

(1) Sanjan from the river Dantur (Dantora) to the river Par, which has given its name to Pardi (Par-Nadi) near Udwada. The Mobeds or priests practising their profession within these limits were known as Sanjana Mobeds.

(2) From the river Par to the river of Bariav. These priests were Naosarians, i. e., Navsari Mobeds.

(3) From Bariav to Ankleshwar. These priests are known as Godarians now known as Godavras).

(4) From Ankleshwar to Khambayat (Cambay). These were Broach Mobeds.

(5) Khambayat. These priests were known as Khambatas.

About A. D. 1490 a catostrophe fell upon the Pārsis who remained at Sanjān. The town under the rule of the Hindu king was invaded by Alafkhān, the prime minister of Sultan Mahmud of Gujarat. The Pārsis under the leadership of Ardeshir fought for their Rājā and in the final scuffle met defeat and Ardeshir was killed. Sanjān fell into the hands of the Muhammadans and most of the surviving Pārsis fled with their Secred Fire to the adjoining hill of Bahrut, where they remained for 12 years. The Sacred Fire was thence removed to Bānsda or Wānsda (1502), thence to Navsāri (1516), thence to Bulsār (1741), and thence to Udwāda (1742) where it is still burning.

The first place mentioned in the Kisseh-i-Sanjān as one of the towns to which the Pārsi went from Sanjān is Vānkāner, a small place in the Surat district (and not the Vānkāner in Kathiawar). In Ankleshwar and Broach, both situated on the banks of the Narmada, the community seems by the middle of the thirteenth century to have largely increased in numbers. Variāv near Surat is the next place mentioned in the Kisseh-i-Sanjān as the town to which Pārsis went from Sanjān and settled. Tradition says that they were massacred there in large numbers, falling prey to the wrath of the local Rājā who had demanded large tributes from them. Ankleshwar developed a flourishing Parsi population ; and in 1517 a Tower of Silence and a Fire-Temple were built there. In 1616 the Pārsis of Swally (Surali) then increasing in importance, sent for priests from this town. Similarly in 1659, the Parsis of Tāna near Surat sent for a priest. A muhammadan writer who lived in Delhi about 1211 A. D. represents the Pārsis as living at Cambay at the end of the eleventh century and as having some influence with the Hindus there. A few families are still to be found at Cambay but owing to the loss of their liquor business are not prospering.

The Pārsi centre demanding greater attention is Navsāri, because at the same time that it grew in population, it became the head-quarters of the Parsi priest hood and the seat of some literary activity. The first Pārsi priest to go from *Sanjān* and settle in Navsāri in A. D. 1142 was *Kāmdin* Zarthost, and it is said that in response to a call for more priests from his two sons Rāna Kāmdin and Mobel Kāmdin, Homi Babamanyār and his son Faredun went from *Sanjān* to Navsāri. On the death of Homi Bahamanyār and his son Fardun, the latter's three sons Asa, Māhiyār and Chānda carried on the sacerdotal work, and the present *Pārsi* priests of Navsāri derive their descent from the five i. e. the three sons of Fardun and the two sons Rāna and Mohad of the first comer.

Of the literary activites that developed at Navsāri, along with the development of Pārsi priesthood and their sacerdotal activities could be mentioned the Persian Viraj-nameh known as Viraj-i-Kausi, written in 1533 by one Kaus Faribourz from Persia, followed by the work Dastur Bahman Kaikobad who

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recorded in Persian verse in 1600 under the title of Kisseh-i-Sanjān. the traditional account of the emigration of the Parsis from Persia to India.

Though many Pārsis had begun to settle in Bombay under the Portuguese (A. D. 1530-1666), almost all continued to consider Surat or Navsari as their home, and during the second half of the eighteenth century after the transfer of Surat to the British (A. D. 1759) the Pārsis there rose greatly in wealth and position. In A. D. 1774 according to the Dutch traveller Stavorinus there were about 1,00,000 Pārsis in and round Surat. There were no beggars among them, and they much surpassed all the other people in industry. The importance of the community in the civic life of the city could be gathered from the fact that several of the wards or *Parās* in Surat are named after Parsis, e. g., Rustumpurā, named after Rustam Manek, a leading English broker about A. D. 1660 ; Nanpurā, named after Nanabhai Narasungji Patel a wealthy landlord ; and Mancherpurī, named after Mancherji Kharsedji Seth a well-known Dutch broker and merchant between A. D. 1740 and 1784. The Musalman governor of Surat feared their superior courage and let them live in their part of the city very much as they liked. In 1783 Forbes noticed that in Surat of late years the most beautiful villas and gardens, at least those in the best order, no longer belonged to Moghuls or Hindus but to Parsis.

During the early part of the nineteenth century the Pārsis continued to prosper. In the general depression of 1825 in Surat the Parsis alone were well-to-do without a beggar among them. Besides as wealthy merchants Pārsis rose to high posts under the East India Company and in the Indian states. The eighteenth and the early of the nineteenth century were times of the greatest prosperity of Gujarāt Pārsis and especially of Surat Pārsis.

Divisions.

There are no sub-divisions among the Pārsis corresponding to sub-castes in other communities. But, since about 1736, they have been divided into two sects the Shāhenshāhi and the Kadmi. This division arose from a dispute regarding the reckoning of the year. Shāhenshahis are those who kept to the Indian reckoning and the Kadmis those who adopted the Persian practice. Formerly inter-marriage among the divisions was shunned but it is now common. Conversions from one division into another are rare.

Community.

Till 1865 in all parts of Gujarāt, local councils called *anjumans* or *panchayats* settled all Pārsi social and religious disputes. The spread of European ideas and the decline of the power of the leading families in the community led to the formation of the Parsi Law Association in 1855 and their efforts resulted ten years later in Government passing two Acts, the

Pārsi Marriage and Divorce Act of 1865 and the Parsi Succession Act of 1865 regulating the Pārsi customs relating to marriage, divorce and succession. Since the passing of these Acts the local councils have ceased exercising the powers they once enjoyed of controlling the community life of the people and at present they occupy only the position of trustees of the public funds belonging to the several community bodies. The funds of the Surat Parsis have been in charge of the trustees of the Pārsi Surat Charity Trust Fund established at Bombay in 1841. Before 1841 there did not exist any constituted body of Parsis at Surat, but certain leading citizens managed some trusts.

The nucleus of the Pārsi Surat Charity Trust Fund which came into existence by a trust deed made in 1841 in Bombay was an amount of about 98,000/—. It comprised Rs. 59,000, the surplus allocated to Pārsi from a fund collected by Sir Jamsetjee Jejeebhoy and others to help all those who suffered in a big fire which broke out in Surat in 1837 and which destroyed thousands of houses in the city, and Rs. 23,700 collected in China from Pārsi businessmen there. To this was added Rs. 13,300/—handed over by some of the trustees of the Surat Panchayat. Thirteen leading citizens from Surat were then selected by the Bombay trustees of the Pārsi Surat Charity Trust Fund to act as the first set of trustees of the Surat Parsi Panchayat.

Thenceforth these trustees, nominated as they are by the trustees of the Pārsi Surat Charity Trust Fund at Bombay, are also removable by that body. The corpus of the Parsi Surat Charity Fund is at Bombay and the income is sent to the Surat Trustees for use and disbursement for certain charitable objects provided in the Trust Deed of 1841. This body which is at Bombay has nothing to do as such with the Bombay Pārsi Panchayat, the two bodies being entirely different.

In course of time, as the confidence of the community grew in the good management of the Trustees of the Surat Pārsi Panchayat, large funds began to be entrusted to them for various charitable objects and they began to manage these funds as an independent body under the terms and conditions of those trusts. Most of the corpus has been entrusted as custodian trustees to the trustees of the Pārsi Panchayat, Bombay. But the Bombay Panchayat has no say in the management of those trusts by the Surat Panchayat. From these funds the Surat Panchayat not only gives doles, pays large scholarships for education, manages the Towers of Silence and holds Ghambars, but also manages a number of useful institutions like maternity and general hospitals, orphanage for boys, secondary schools for boys and girls,

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a home for the aged and decrepit and other useful institutions for the community. The assets under its management now, inclusive of immovable properties, are of the approximate value of Rs. 1,50,00,000/—.

Food and Drink

Though the ancient Irānians ate the flesh of horse, camel, oxe etc. the Indian Pārsis as a body abstain from these. Orthodox Pārsis eat flesh of cloven footed animals and abstain from beef, pork and the flesh of other uncloven footed animals. As to fish, they eat scaly fish and abstain from unscaly fish. There are neither religious nor social rules to prohibit a Pārsi from the use of alcoholic drinks.

Rich and middle class Pārsis take three meals a day, at morning, noon and night. Their morning meal or break-fast consists of tea, wheat or rice bread, eggs or minced mutton and butter. Their middaay meal or lunch consists of cooked rice, *dal* (split pulse), fish or mutton and pickles. Their evening meal or supper consists of wheat or rice bread, one to three or more dishes of mutton or fowl cooked with vegetables of different kinds, fish and pickles followed occasionally by fruits. The poor before going to work break their fast with cold thick millet bread prepared the night before and tea or *chhās* or curds. At noon they have cooked rice with split pulse or curds and pickles, and in the evening millet bread with some vegetables, cooked peas and pulse, and occasionally mutton or fowl.

In old days Parsis generally ate seated on a cloth and from a copper or brass plate on which the dinner was piled. Now-a-days, they use chairs and tables and eat off china plates. Most eat with their fingers. In pre-prohibition days *tadi* (palm juice) was a favourite drink at almost all meals and especially at feasts and a glass of mowra (bassia latifolia) liquor and English liquor or wines was especially liked by old men.

There is evidence to say that up to about 75 years ago, Pārsis did not eat *pakki*, i. e., food cooked by non-Pārsis. The custom is no more observed by the laity ; the priesthood, especially the officiating priesthood, still abstain from food prepared by non-Pārsis. Parsis do not eat the leavings of others, even if

they be of their co-religionists and relatives. The food wherein the eater has put his fingers into his mouth and then touched the food again is known as *ajithu* and is not acceptable to others. Two persons would not drink from the same glass or cup.

Abstinence from smoking was at one time one of the distinguishing customs of Pārsis but this is no longer the case especially among the younger people.

NAVZOT *Initiation.*

Parsi boys and girls are initiated to the Zoroastrian faith between the age of seven and nine. The ceremony which consists of clothing the child with a sacred shirt *sadra* and a sacred cord called *kusti*, is known as the Navzot or making a new believer. About seven in the morning of the day fixed for the ceremony the child is seated on a stone slab, and, guided by a priest, offers a prayer, and chews a pomegranate leaf. Swallowing the juice, it takes three sips of *nerangdin* *(bull's urine), recites the *patet* (confession of sin) and undergoes *nahan*, a ceremonial bath. After this the child dressed in trousers cap and a muslin shouldercloth is brought into the hall where friends and kinspeople are seated on a large carpet. The child occupies a slightly raised central seat facing the east, the officiating priest sitting in front and other priests on either sides. The priests repeat the confession of sin, the child joining in the prayer, holding the sacred shirt in its left hand. The senior priest then draws near the child who rises and standing repeats after the priest and when so engaged the priest draws the shirt over the child's head. Then the child takes the sacred woollen cord in both hands, and the priest holding its hands repeats the sacred-thread prayer in a loud voice, the child joining him. While the prayer is being recited, the sacted thread is wound round the child's waist and the ceremony ends as the child repeats the closing words, 'Help me O Lord ! Help me O Lord ! Help me O Lord ! I am of the Mazdiashni religion, the Mazdiashni religion taught by Zarthost.' The priests then recite blessings and throw on the child's head rice, pomegranate-seed and cocoa-kernel.

Religion.

The Pārsis follow the religion of Zoroaster, who was born in the region of Azarbaizān in Persia, and who first promulgated his religion in Balkh or Bactria. Opinions vary as to the time when he flourished. Classical authors such as Hermiphos, Aristotle, Plato, Diogenes and others refer to him and give as his date years varying from 7000 B. C to 525 B. C., and Parsi books well-nigh unanimously as about 700 B. C.

The leading belief in which as a Zoroastrian the ordinary Parsi holds, is the existence of one God Ahura Mazda, the

* This urine which has necsssarily to be of a pure white bull (maintained for the purpose in fire temple goes through all elaborate consecration ritual before being used for all the main ceremonies of the Parsis.

creator of the universe, the giver of good, the hearer and answerer of prayer. He is the most spiritual among the spiritual ones. His distinguished attributes are good mind, righteousness, desirable control, piety, perfection and immortality. He not only rewards the good but punishes the wicked. All that is created is his work. Next to Ahura Mazd the name most familiar to a Pārsi is that of Ahrimān, Angromanyus, or Satan, to whom he traces every evil and misfortune that happens to him, and every evil thought and every evil passion that rises in his mind. He thinks of Ahura Mazd and Ahrimān as hostile powers and in his prayers he often repeats the words, "I praise and honour Ahura Mazda ; I smite Angro Manyus". He believes that every man has an immortal soul which after death passes either to a place of reward *behesht* or of punishment *duzak*. The reward or punishment of the soul depends on its conduct during life. He believes in good angels who carry out the wishes of God and who watch over fire, water and earth. He venerates fire, water, sun, moon and stars which Ahura Mazd has made. He believes in evil spirits who are in league with and obey Ahrimān. He believes in Zoroaster or Zorathrustra as the Prophet who brought the true religion from Ahura Mazda.

Fire is the chief object of Parsi veneration and the Fire Temple is the public place of Parsi worship. The Sacred Fire is consecrated with several ceremonies and then installed in their Fire-Temples, of which there are three grades; the household Fire called the Atesh Dadghan ; the Aderan, literally Fires, because it is composed of several kinds of fire ; and the Atesh Beheram, the fire of Beheram which is composed of sixteen kinds of fire. Atesh Dadghan is the hearth fire which a Pārsi never allows to die out. If he changes his place of residence in the same town or village he carries his fire with him to his new abode. The Aderan, a fire of greater sacredness, is a plural word, because it is made of fire taken from the house of a member of each of of the four classes of the old Persian community, the priest, the warrior, the husbandman, and the craftsman. The Atesh Behram, that is the fire of the Angel of Success, is worshipped in four temples in Gujarat of which two are in Surat, and one each in Udwāda and Navsāri . The difficulty in purifying the fires is the reason why so few temples have the Behram fires.

Religious Pārsis visit the fire temple almost daily, and on four days each month, the 3rd, 9th, 17th and 20th which are sacred to fire, almost all Parsis go and offer prayers. Men and women come to the same part of the temple and worship-the fire in the same way. On reaching the fire temple the wor shipper washes his face, hands and feet and recites the *kusti* prayer. Then carrying a piece of sandalwood and some money for the officiating priest, he passes through the outer hall. On entering the inner hall on which a carpet is spread he takes off

his shoes and goes to the threshold of the central fire room, kneels, and again standing begins to recite prayers. The worshipper is not allowed to pass the threshold of the fire room which the priest alone is allowed to enter. Soon after the worshipper reaches the threshold one of the priest brings the worshipper ashes from the urn in a silver or copper-brass ladle. The worshipper takes a pinch of the ashes and applies them to his forehead and eyelashes and hands over to the priest the money and sandalwood. When his prayers are over the worshipper walks backwards to where he left his shoes and goes home.

Besides fire the objects of Zoroastrian veneration include six *ameshāspands* (immortal beings) and a number of *Yazads* (worshipfuls). The *ameshāspands* are supposed to preside over the moral attributes which are represented by the meaning of their names. Ahura Mazda is himself at times spoken of as an *ameshāspund* standing at the head of all. The *yazads* who are powerful spiritual existences pervading the whole universe number in hundreds and thousands, but of them thirty are supposed to preside over the thirty days of the month, wh ch are as it were, sacred to them.

Pārsis have no saints in the sense of Christian Saints or of the Muhammadan pirs. But historical personages of ancient Iran, known for performing some great service for the country in their times are, as it were canonized by a respectful mention of their names in the *afringan* ceremony performed in honour of the dead.

Marriage.

In old days child marriages were prevalent, particularly among Parsees who lived in villages, but that custom has disappeared and boys and girls now generally marry only after reaching the adult age. Polygamy, in the sense of marrying several wives in the ordinary course was and is never permitted. But till 1865 when the Parsi Marriage and Divorce Act (XXV) was passed making polygamy illegal, a Parsi was allowed by the Panchayat or the elders of the community to take another wife in exceptional cases, such as continued illness, barrenness, faithlessness or bad conduct, etc., of the wife Section 3 of the Act lays down that a Parsi shall not marry within certain degrees of consanguinity and affinity (which are thirty-three in number but do not include the collateral cousins), the marriage shall be according to the Pārsi form of ceremony called *Asirvad* by a Parsi priest in the presence of two witnesses other than the officiating priest, and if any one of the couple is under twenty-one a consent of his or her guardian shall have been previously given to the marriage.

Marriage Ceremony.

Of the marriage customs followed by the community it is not possible to say now with certainty which are originally Iranian or Zoroastrian and which Indian or alien. At a time

when early marriages were prevalent the elders negotiated their children's marriages. When two families agreed in wishing their children to marry, they exchanged their children's horoscopes. If both families approved of the match and the stars found favourable a betrothal ceremony which consisted mainly of exchange of gifts between the two parties, and though not legally was practically binding, was gone through. During the interval between the betrothal and the marriage, presents of fish and other tokens of goodwill passed between two families. At both houses kinswomen used to meet and choose four young married and unwidowed girls to pound turmeric and shake it in a winnowing fan, while songs were sung. About eight days before marriage took place the *māndava* or booth-building ceremony, and, either before or after the turmeric-pounding, sometimes even on the marriage day, the *Adarni* or inviting ceremony was performed. Following this the boy and the girl in front of their respective houses were rubbed with turmeric pounded fifteen days before, and bathed with fresh water. Religious rites and ceremonies were performed by *Mobeds* (priests) in honour of ancestral spirits who were called to bless the marriage.

These ceremonies which bear the impress of Hindu customs and superstitions are now rarely observed by modern Pārsis. At present the marriage consists of the following parts :—

I. The preliminary ritual.

II. The *Asirvād* (The marriage ceremony proper).

I. The preliminary ritual consists of the following ceremonies :—

(a) The *ādā antar* or the curtain ceremony, wherein the couple are at first separated by a curtain and made to sit opposite each other.

(b) The tying by the senior officiating priest of a marriage knot, wherein the couple are enclosed in a circle by a piece of cloth, the ends of which are tied during the recital of the sacred formula of *Ahunavar*.

(c) The hand-fastening (*hāthevāro*), wherein the priest places the right hand of one in the right hand of the other, and then fastens the hands with raw twist during the recital of the above sacred formula.

(d) The encircling of the couple with raw twist passed round them seven times during seven recitals of the above formula.

(e) The throwing of the rice wherein the couple, who are provided with a few grains of rice in their left hands,

at a certain signal given by burning frank incense on fire presented before them in a vase, throw rice upon one another. The one who throws first indicates thereby that he or she will be the foremost in loving and respecting the other.

This preliminary part of the ceremony, not being the solemn and religious part, is now dispensed with by many.

II. The *ashirvād* recital is the ceremony proper, being the essential or binding part of the marriage ceremony. In consists of the following :—

(a) A preliminary blessing, wherein the senior priest blesses the couple, wishing them a healthy and prosperous long life of 150 years and a healthy progeny of sons and grandsons.

(b) The asking of consent, wherein the senior priest takes the consent of the couple and their respective witnesses to the marriage.[1] This consent is asked thrice.

(c) A joint address by both the officiating priests, wherein they admonish the marrying couple and say prayers and benedictions. They throw rice over the couple while giving these admonitions and reciting these prayers and benedictions.

Widow re-marriage

Remarriage of widows is permitted. The widow may marry, if she likes, her husband's younger or elder brother.[2] As to the limits within which she may marry, there are no particular special limits other than those for a woman marrying for the first time.

The form of re-marriage and the essential binding portion are the same as in the case of the first marriage. But the affair is a quiet one in old days. was The few points of difference were the following :—

(a) In the case of first marriage , the ceremony was, at one time, performed twice, once in the evening and again at midnight. But in the case of a re-marriage, it was performed only once, and that even rather quietly at some odd hour between the early part of the night and midnight.

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1. For a brief account of the marriage ceremony, *vide* paper on the "Marriage Customs of the Parsees," Journal of the Anthropological Society of Bombay, Vol. V, No. 4, pp. 242-82,

2. It appears from Firdousi's Shahnameh that marriage with a brother of the deceased husband was permitted even in old Iran. King Kai Khusro's mother Firangiz married Fariburz, who was a younger brother of her deceased husband Siavakhsh.

CHAPTER 3.

The People and their Culture.

PARSIS

(b) In first marriages, rice was thrown by the priests with the palm of the hand lower down, but in the second marriage, with the palm of the hand open above.

(c) A change of few words in the preliminary blessing, to say that the lady is not a virgin and that marriage is a second marriage.

It may be observed that now-a-days the first two differences are not generally observed.

Divorce.

According to the Parsi Marriage Act divorce or dissolution of marriage is permitted in the following cases :—

1. Lunacy or mental unsoundness at the time of marriage, of which one of the contracting parties did not know.

2. Impotence.

3. Continued absence for seven years of either party, without being heard of as alive.

4. Adultery of the wife.

5. Adultery or bigamy with adultery, or adultery with cruelty or adultery with wilful desertion for two years or upwards, or rape or unnatural offence on the part of the husband.

Formerly divorce was permitted by the elders for some other reasons besides the above, such as continued quarrelsome disposition, and when the wife bore no child or was a hopeless invalid.

The form by which the divorce was formerly effected in India was a written document known as *fārgati* meaning a release (from Persian *fārag* free).

Wives who have been divorced may marry again.

Inheritance.

Parsis follow their own laws of inheritance. The present Parsi Intestate Succession Act, No. XXI of 1865, was framed on their own communal customs.

Death and funeral

When life is gone the body is washed, dressed, wrapped in old freshly-washed white cotton cloth, and laid in a corner of the front hall north and south with the feet towards the north, either full length or with legs crossed. A lamp fed with *ghee* is kept burning at the head and a priest repeats prayers and burns sandalwood and benjamin in a censer in front of the body. The women of the family and their friends sit within the doors a little away from the body sobbing and crying, and

the men and their friends sit outside in the street in long rows on benches and chairs. A number of priests attend and say the prayers for the dead. Two of them chosen for the occasion recite Avunvat Gatha, a portion of the Yasna which is called *Gehsārnā*. In the midst of the recitation the two priests turn round, the attendants lay the body on the bier,[1] and a dog is brought to look on the face of the dead and drive away evil spirits. Then the two priests again turn towards the body, finish the reciting and leave the door. The male friends of the dead go to the door, bow, and in token of respect for the dead raise their two hands from the floor to their heads. The two attendants bring out of the house the bier with the body laid on covered with a sheet from head to foot and make it over to four more bearers[2] outside, who like the attendants are dressed in freshly washed white clothes. All the men present stand while the body is taken from the house and bow to it as it passes. The body is carried feet foremost first followed by priests in their white dress and then by mourners all walking in pairs holding between them the ends of a handkerchief known as *paiwand* (lit connection).

Pārsis expose their dead in round structures known by them as *dokhmās* or ordinarily known as Towers of Silence. The Moghal Emperor Akbar had presented to the community 100 binghas of land in the village of Umervada, Taluka Chorasi on the eastern outskirts of the City for construction of the Tower of Silence (*dokhma*) for the disposal of the dead bodies of the Parsis. The original documents of grant were destroyed in one of the two attacks Shivaji made on Surat in the year 1664 and 1669. In the year 1752 the ruling Emperor Ahmedshah on the representation of leading Parsis of Surat, after examining the records, issued fresh grants in respect of the said lands. There are signs of three old *dokhmas* on the land and it is believed that they were built sometime between 1556 and 1605. One of the existing *dokhmas* was built in 1771 which is the largest in India. In places where there are no such Towers, they unavoidably bury but never burn. Except when death happens at night the body should be carried to the Tower of Silence as soon as possible after death.

At the Tower of Silence, which is generally some way from the town, the bier is set down at a little distance from the door. When all have again bowed to the dead the bier is taken by the bearers into the Tower where the body is lifted from the bier and laid on the inner terrace of the Tower. The clothes are torn off

1. The bier is a plain bedstead without the canopy, standing about six inches from the ground and with two long side-rods to rest on the bearer's shoulders.

2. The bier-bearers must always be Parsis. They are known as *Nasesalars* and are paid and set apart as body-carriers by the Parsi Panchayat or local board. They are usually poor and destitute laymen, the priestly class among the Parsis being entirely free from the duty of carrying the dead. The *nasesalars* when on duty are dressed in white, and they either wear gloves and stockings or wrap linen round their hands and feet.

and the body is left to the vultures. Each of the funeral party before he returns home has a little cow's urine poured into his left palm, recites the *nerang* prayer, washes his hands and feet at a well near the Tower, and repeats the *kusti* prayer. Similar procedure he follows on reaching home and resumes his daily activities after a bath and a change of clothes.

Every morning for three days after a death rice is cooked and laid in the veranda for dogs to eat. The place in the house where the body was laid is railed off and is not used at least for ten days, during the time lamp being kept burning and a jar filled with water and with flowers in its mouth being set on it.

They perform some ceremonies in honour of the dead during the first three days. They are known as the *sarosh* ceremonies. Most of these are performed in their Fire Temples. The *uthanna* (rising from mourning) ceremony is performed in the afternoon of the third day when after the prayers are over, the son or the adopted[1] son of the deceased bows before the high priest who makes him promise to perform all religious rites for the dead. The friends of the deceased then read a list of charitable contribution in memory of the dead. The other principal occasions for the performance of the ceremonies are the *chahrum* (fourth), the *dehun* (tenth), the *si-roz* (thirtieth) and the *sál-roz* (anniversary) day after death. The ceremonies in honour of the dead performed after the third day are generally spoken as the *baj rojgar* ceremonies, and they correspond to some extend to the *śrāddha* ceremonies of the Hindus.

Holidays
Jasans.

For Parsis the day of the month that bears the same name as the month is a holiday. On the name-day of each month the high priest, priests and leading men meet in the hall of the fire temple and one of the priests feeds with sandal and frank-incense a small fire-urn and all recite hymns of praise and thanksgiving in honour of the guardian angel of the month. They then partake of fruits and flowers kept in trays there. This rite kept in the fire temple and by the well-to-do in thier house is known as *jasan* that is feast. Among the twelve month-name days the seven which are especially popular and important are : (1) *farvardin-jasan* (All souls feast) falls on farvardin the 19th day of farvardin, the first month of the Parsi year; (2) also known as *farvardin-jasan* (All souls feast) which falls on the 19th day of Adar, the ninth month; (3) *meher* or *meherangan jasan* (sun feast) falls on 16th day Meher, the seventh month; (4) *Avan Arduisur Jasan* (water spirit feast) falls on the 10th Avān, the eight month; (5) *adar jasan* (fire feast) falls on the 9th day of Āder, the ninth month; (6) *bahman jasan* (animal

1. In case of a childless man, if he is of the age of 15 or above, he is given a son in adoption at the *uthanna* ceremony. Usually a near member of the family, a younger brother or a nephew or such near relative from the father's side is selected, his name announced as the adopted son, a *Tandurusti* (benedictory prayer) is recited for his welfare and then his name is mentioned occasionally as one directing the ceremony in the prayers in honour of the deceased.

feast) falls on the 2nd day of Bahman the eleventh month; (7) *aspandād jasan* (earth feast) falls on the 5th day of aspandad, the twelfth month. The five remaining *Jasans* are: (8) *ardibehest jasan;* (9) *khordad jasan;* (10) *amardad jasan*; (11) *shanvar jasan*; and (12) *deh jasan.*

Gahambars.

Besides the monthly *jasans* or feasts other festivals called *Gahambārs*, literally season-feasts, are held in great veneration among the Pārsis. These feasts as they originally marked the seasons are held six times a year, each lasting five days, when the whole community meet on terms of equality and offer prayers and thanks and join a common feast. These season-feasts are: (1) *mediozarem* or mid-spring in Ardibehest; (2) *medioshem* or mid-summer in Tir; (3) *peteshem* or the in-gathering in *shanvar*; (4) *yathrem* or summer's farewell in *Meher*; (5) *Medirem* or mid-winter, in *Deh*; (6) *hamaspethmedem* or winter's farewell, falls during the last five days of the year and these five days are named after the names of the five *gāthās* or hymns which are attributed to zoroaster himself and are the most sacred of Zoroastrian writtings. These five extra hymn days together with the last five days of aspand the last month, are held sacred for the *muktad* or ceremony in honour of the dead. Besides the *jasans*, the gahambārs and the five hymn days, Pārsis keep seven leading high days: (1) navroz the New Day, commonly known as Pāteti, a day of universal rejoicing (2) Two days after Naoroz falls the second high day called ardibehesht, the third day of the first-month on which is performed the rapithavan or mid-day ceremony in the fire temple (3) Three days later, *i. e.*, on the sixth day of the first month falls khordād sāl which is believed to be the anniversary of the brithday of Zoroaster. It is kept with as much pomp and rejoicing as the New Year's Day. (4) Next day after khordād sāl falls Amerdād Sāl, the fourth high day and holiday-wakers keep it as a feast in continuation of the Khordād Sāl. (5) *Jamshedi Naoroz* or Jamshed's New Day is the fifth high day and it falls on the 21st of March when the sun enters Aries. (6) The sixth high day which falls on the 11th day of deh is called *zarthostno diso* and is held sacred to the anniversary of Zoroaster's death (7) A day known as *din behe mazdiasni jasan*, that is, the feast of the holy mazdyacian religion which falls on the 29th of Aspandad is the seventh high day of the Parsis. It is worth noting that among Parsis as eating and drinking are considered religious acts and fasting and penance are forbidden, all holidays are spent in feasting, rejoicing and prayer.

Hymn-days.

Leading days.

Occupation.

Among their early occupations the Gujarāt Pārsis included argiculture, liquor-selling, toddy-drawing, ship-building, money-lending, brokerage, etc. The original occupation of most of them was argiculture, being highly recommended by their scriptures. In later times, next to agriculture, they took to liquor-selling. It appears from some Portuguese documents that in the first half of the 18th century some Parsis

did shipping business, built and owned boats, and carried on the coasting trade. Some served the Portuguese as soldiers and were even given ensignship and captainship. After the advent of Europeans into India some served them in various capacities. Some well-to-do Pārsis were brokers in the factories of the English, the Dutch and other nations. Some served even as domestic servants, and as messmen and Chowdries in British military contonments. They are no longer seen now in these services.

Of these occupations, liquor-selling has disappeared because of the introduction of prohibition in the State. Argiculture continues but on a much smaller scale. Some Parsis are still land-owners in Surat district, and up to a few years ago they cultivated the land not personally but through the system of hereditary labourers (*halis*) who work more like serfs than independent voluntary workers. The new tenancy legislation passed by the State makes it possible only for those to own lands who cultivate them themselves.

Formerly in Gujarāt, especially when Surat with its surrounding villages formed their headquarters, Pārsis resorted to several arts for their livelihood. The principal among these was that of weaving on primitive looms. Many households had looms on which they worked out *nārās* (laces), *dātis* (broad lace like ropes and even cloth. In the well-known silk work of *kinkhāb* for which Surat was then well-known, Parsi weavers had their hand. The only work of weaving which is still carried on by a few, and those few are the women of the priestly class, is that of weaving *kustis i. e.* sacred thread worn by Pārsis as one of the symbols of their faith. The orthodox still consider it meritorious to put on the *kustis* prepared and properly consecrated by the women of the priestly class.

The next important occupation of the Pārsis at Surat was that of *churis* or bangles, from which a class of them was called Churigars, *i. e.* bangle-makers. That name forms even now the surname of some families, though the occupation is no more followed by them. A hundred years back, Pārsis generally abstained from work such as that of a goldsmith or silversmith which required blowing with their breath or extinguishing fire, an object which they revered. Again at one time there was some hesitation felt over the study of western medicine, as in the study of surgery etc., required by it they had to deal with corpses which none but the cropse-bearers (*nasesalars*) would touch with impunity. Similarly, because the Parsi scriptures strictly enjoin that water particularly of rivers and streams may not be defiled, Pārsis, though at times they owned a large number of ships and carried sea-coast trade in their own boats, were never professional sailors.

CHAPTER 3.
The People and their Culture.
MUSLIMS.
Population.

Muslims, according to the 1951 census, are returned as numbering 1,22,734 (*m.* 61,686; *f.* 61,048) in the district of Surat, or 6.71 per cent of the population. In 1822 the percentage was 9.46. Their tract-wise distribution over the district is as follows :—

Rural areas: 56,527 (*m.* 27,575; *f.* 28,952)—Olpad, Chorasi, Kāmrej, Mangrol and Palsāṇā, 23,049 (*m.* 11,091; *f.* 11,958); Navsāri 8,608 (*m.* 4,236; *f.* 4,372); Bānsda, Mahuwā and Gandevi, 5,212 (*m.* 2,532; *f.* 2,680); Bārḍoli, Māṇḍvi, Vyārā, Songadh and Volod, 5,899 (*m.* 2,970; *f.* 2,929); Bulsār and Pārḍī, 5,520 (*m.* 2,875; *f.* 2,645); Chikhali and Dharampur, 8,239 (*m.* 3,871; *f.* 4,368).

Urban areas: 66,207 (*m.* 34,111; *f.* 32,096)-- Surat city, 39,139 (*m.* 20,690; *f.* 18,449); Chorāsi and Kāmrej, 9,034 (*m.* 4,241; *f.* 4,793); Bānsda, Navsāri, and Gandevi, 9,502 (*m.* 4,911; *f.* 4,591); Vyārā, Māṇḍvi, Songadh and Bārḍoli, 4,042 (*m.*1,992; *f.* 2,050); Bulsār and Dharampur, 4,490 (*m.* 2,277; *f.* 2,213).

This population of the district, as that of Gujarat in general, is divided into two main sections: those who have a foreign strain and those who are almost entirely of local Hindu descent. The former consists mainly of immigrants or their descendants who came to the country as Muhammadans, from the eighth century onwards, and the latter of converted Hindus who joined Islam either from convictions in response to the teaching of missionaries, or responded to pressure applied by zealous Muslim rulers.

The census ennumeration of the Muslim population of the Surat district for the years 1901, 1911, 1921, 1931, and 1941 records the existence of the following divisions[1] :—Arab, Bhangi, Bhat, Bhatiyārā, Bhavavā, Bohora (Shia), Bohorā (Sunni), Chippā, Dhobi, Fakir, Ghanchi, Hajām, Hapsi, Kasai, Khatri, Khojā, Kumbhar, Memon, Mochi, Molvi, Momnā, Moghul Paṭhāṇ, Pinjāri, Saiyad, Shaikh, and Tāi.

Of these, immigrants and their descendants under the name of Saiyads, Shaikhs, Moghuls and Paṭhans formed one community, and though Saiyads claim social precedence over the other three and prefer to marry with Saiyads, there is no sort of prohibition, either by religion or custom, of intermarriage. Arabs, Bohorās, Memons and Khojas are more or less endoga-

1. It is almost impossible to secure accurate statistics of these Muslim divisions at the time of a census. Many caste members will simply style themselves 'Musalman' or go by the general term Shaikh which used to denote any Hindu convert.

In 1891 the Musalman population of Surat District which numbered 52,307 consisted of 1,550 Sayads, 27,670 Shaikhs, 2,585 Pathans, 367 Moghuls, 304 Memons, 12,905 Bohoras and 6,626 others. In 1872, of the total Musalman population of 52,157 souls, 21,260 were returned as settled in Surat City, 4,117 in Olpad, 3,888 in Mandvi, 6,454 in Chorasi, 3,090 in Bardoli, 3,449 in Jalalpur, 5,285 in Chikhali, 3,592 in Bulsar, and 1,422 in Pardi.

mous communities belonging to this category. The rest are Hindu converts some of which marry freely with other Muhammadans and some maintain their former porhibition of marriage outside the caste.

Saiyads.

Of the four classes into which the Muslims of foreign extraction are divided, the Saiyad claims descent from Fātimā and Ali, the daughter and son-in-law of the prophet, and are the descendants of those who came to Gujarāt as religious teachers, soldiers, and adventurers, when the Muslims ruled the country. To indicate their high birth they place the title *Saiyad* or *mīr* before, and *shāh* after their names; and *begam*, if women. They give their daughters in marriage only to Saiyads but take wives from other Muslims. Saiyads follow all callings, but some families, as descendants of saints hold to the position of *pīrs* or spiritual guides. They are both Sunnis and Shias, but in Surat the majority are Sunnis.

Shaikhs.

Shaikh is a term which means elder and is applied to descendants of local converts as foreigners. The men have the title *shaikh* or *muhammad* placed before their names, and the women *bibi* after theirs. They follow all callings and are found in every grade of life.

Moghuls.

The Moghuls are the descendants of the Moghul followers of the Viceroys of Gujarāt in the time of the Moghul empire. They place the title *mirzā* (born of a great man) before their names and add *beg* (lord); the women add *khānum* to their names. Except that they are fairer in complexion Mughals do not differ in appearance from ordinary Muslims. In religion they are Sunnis, and observe the *purdah*.

Pathans.

The Pathāns are of Afghān origin. They came to Gujarāt as soldiers and merchants, and are of two classes; old settlers and *vilaitis* or new-comers from Afghanistān. The new-comers; are generally fair, large-boned, broad-chested, and well-limbed, many of them with hooked noses and eyes blue, gray and brown. All are Sunnis in religion, but except the new-comers, as a class they pay little attention to their religions duties.

Of the rest of the Muslim communities in the district who are mainly of local Hindu desent, the Bohorās, the Khojāhs and Memons[1] are distinguishable by some of their peculiarities.

Bohoras.[2]

Regarding the origin of the names Bohorā various theories

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1. For Khojahs and Memons *see* Ahmedabad Gazetteer (revised).

2. The Bohoras in the district, according to past few censuses numbered as follows :—

In 1872 the Musalman population of the district belonged to two sects, Sunni and Shiah, the former numbered 47,719 souls, or 91 49 per cent. of the total Musalman population, and the latter 4,438, or 8.51 per cent. Of these the cultivating Bohoras, for the most part Sunnis by religion, were found chiefly in the northern sub-divisions. The town or trading Bohoras who numbered 4,577 souls, had their head-quarters in Surat, where their chief priest, the Mulla Saheb resided. The figures for other censuses were as follows :—

—*Contd.* on next page 301

have been forwarded. Many Banias and even Nagar Brahmins to this day bear the surname Bohorā or Vorā, but a Hindu Bohorās caste as such cannot be traced in Gujarāt. As a general term now applied to all converts to Islam from the Hindu caste belonging to unmartial classes, it may be derived from the Gujarāti *vahorwā* to trade,probably coming from the Sanskrit *vyavahāra.*

Bohoras.

Bohoras have two main divisions: (1) Shiahs or trading Bohorās, and (2) Sunnis or cultivating Bohorā*. The former are further split up into five sections-Daudi, Sulemani, Alia, Jaffri and Naghoshi or Rotia. Of these the Daudis, also called Lotias because their turbans are shaped like a *lota* (water-pot) are the most numerous among the Shiah Bohoras are and found in considerable number in the urban area of the district.

Though active and well made, Daudi Bohoras are muscular or even robust. Their features are regular and clear, the colour olive, the expression gentle and shrewd. Orthodox males shave the head, wear long thin beards, and cut the hair on the upper lip close. Their women pencil their eyelids with collyrium, blacken their teeth with *missi,* an astringent powder and redden the palms of their hands and the soles of their feet with henna. Their home-tongue is Gujarāti marked by some peculiarities in pronunciation, such as the irregular use of the dental and palatal *d* and *t* and of *kh* for *qu.*

At the time of prayer a *Daudi* male dresses in a *lungī* (oin cloth) wound round the loins and reaching down to the ankles, a *pairhan* (loose long shrit) and a skull cap. He puts on *khadāms* (wooden shoes) and takes a *musalls* (prayer carpet) along with him while going to the mosque for prayer.

Indoors he wears a *pairhan* (loose long shirt) a dark coloured *pyjamā* or a *tumān* (loose trousers) and a peculiar type of skull cap with strips or of dark colour. Out of doors, those belonging to the religious class of mullas, don a small white *pāghadī* (turban), and, on a *pairhan* or *kurtā* wear an *aṅgarkhā* (Marāthā type) or a long loose *neema* (Moghul type). On it is thrown a white shawl or a *karchobi banārasi dupattā*(scarf). The foot-wear is broad shape too slippers of *Khambati* type made of red skin

1901 : 15,455 (male 7,249, female 8,206).

1911 : 14,910 (male 7,028, female 7,882).

1921 : Shia 5,719 (male 2,862, female 2,857).
Sunni 11,168 (male 5,187, female 5,981).

1931 : Shia 4,567 (male 2,315, female 2,252).
Sunni 12,052 (male 5,399, female 6,653).

1941 : Shia 75 (male 34, female 41).
Sunni 410 (male 197, female 213).

Unspecified 3,152 (male 1,683, female 1,465).

*For an account of cultivating Bohoras *see* Broach Gazetteer. (revised series).

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or *Bannat* cloth. The modern Daudi youth, where he has not adopted items of western dressware, wears a long coat or a *sherwāni* and *tumān*, *ijār* or *pyjamā* (loose trousers), and the peculiar dark coloured Bohorās skull cap and patent leather shoes.

The Dāudi woman wears a red, dark-blue or yellow cotton or silk *odnā* (scarf); a light tight fitting silk bodice or a silk *dagli* (jacket), a silk *ghāgrā* (petticoat) or *izārs* (loose trousers). *Khadams* (wooden shoes) are used indoors and *sapāts* (sandals) out of doors. Her holiday dress is very rich of embroidered silk and brocade. Over the dress, orthodox women wear a large dark-coloured silk veil robe called *burkā* passing over the head. This covers the face leaving small net openings in the front of the eyes, and drapes in loose fold to the ground shrouding the whole figure. The burkhas has however practically disappeared in the larger towns and cities During Muharram Dāudi ladies use black dress as a sign of religious mourning. Both Hindu and Musalman ornaments are worn.

Dāudis are Shias of the Mustalian division of the Ismaili sect.[1] They are fond of piligrimage to Meccā and Karbalā. They abstain from music and dancing and from using or dealing in tobacco and intoxicating drinks or drugs. They are attentive to their religious duties, many both men and women-knowing the kurān. They are careful to say their prayers, to observe *Muharram* as a season of mouring. The chief points of difference between thair beliefs and practices and those of sunni Muslims are that they pay special attention to Ali and his sons Hassan and Hussain and reject the three Caliphs Abu Baker Sidik, Umar and Usman; that they attach special importance to circumcision; that the *akikah* (sacrifice) ceremony is held in the Mullā's house; that at marriage the bride and bridegroom when not of age are represented by *walis* (sponsors); that at death a prayer for pity on his soul and body is laid in the dead man's hands; It is an article of faith with Dawoodi Bohoras that their 21st Imam went into seclusion, that though unseen the Imam is still in existence and may reveal himself at the appropriate time. The Daine-Mutlaq is his representative on earth and exercises all powers of the Imam in the absence of the Latter.

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1. In A. D. 765, upon the death of Jaafar Sadik, according to Shiahs the sixth Imam, a dispute arose whether Ismail the son of Jaafar's eldest son, or Musi Kazim, Jaafar's second son should succeed. The majority who supported Musi form the orthodox community of Shiahs who from the number of their Imams, the last of whom is still to come, are known as *Isna-ashari* or 'Twelvers'. The supporters of Musi's nephew started as a distinct body, and under the name of Ismailis, especially in Egypt, rose to great power. They remained united till in A. D. 1094 on the death of Almunstansir-billah the succession was disputed. Of the late Khalifah's two sons, Nazar the elder, at first named for the succession, was afterwards passed over in favour of his younger brother Almustaali. A party of the Ismailis, holding that an eldest son could not thus be deprived of his right to succeed, declared for him, and were called Nazarians. The other party, called from the younger son Mustalians, prevailed and established Mustali as successor to his father. The Nazarians are to this day represented in India by the Khojahs and the Mustaalians by the Bohora

The thoroughness of their socio-religious organisation, which is known as the Dawat is the most marked feature of the Dāudi Bohorās. Their leader, both in things religious and social, is the Dai-ul-Mutlaq otherwise known as Mullaji who formerly had head-quarters at Surat and now has them at Bombay though Surat is still their second home and a great centre. The ruling Mullāji names his successor generally, but, it is said, not always from among the members of his own family. The head Mullāji (the Bava Saheb) is treated with the greatcst respect and veneration He lives in much state and entertains with profuse liberality.

The Dai-ul-mutlaq and Dawal constitute for Dawoodi Bohoras, in whichever part of the world they live (large numbers live in Pakistan, East Africa and some of the West Asian and Far Eastern areas) the symbol of their oneness and broad homogeneity. In every important town or village where Dawoodi Bohoras live in appreciable numbers the Dai has representative, called the Amil, to look after their religious requirements and social problems. All important local matters affecting the community are referred in the first instance to him and if necessary they are taken in the last resort to the Dai himself whose decision is naturally final. In the religious hiearchy of Dawoodi Bohoras, the successor designate of the Dai is generally called the Mazau. Below him comes the Maquasir. Priests of the lowest grades are called Mullas.

Sulemanis

Sulemāni Bohorās, though not so numerous as Dāudi Bohoras are an influential division of the trading Bohorās. They are the descendants of the converts which were made in Arabia in the sixteenth century by a missionary sent by a Surat Bohorā. These, besides their regular name Ismail became known as Bezai Bohoras from their priest's title Bizai, the fair. For a time they would seem to have considered the Gujarāt high priest their head. But about the close of the sixteenth century (A.D. 1588) Daud bin Ajabshah, the high priest of Gujarāt Bohoras died. Upon his death the Gujarāt Bohoras chose as his successor on Daud bin Kutub Shah, sending news of the appointment to Yaman. Meanwhile one of the Yaman priesthood, Suleman by name, was accepted by the people of Yaman as the successor. He came over to Gujarāt, but finding his claim rejected by all but a very small body, returned to Arabia. Such of the Gujarāt Bohorās as upheld his claim were called Sulemāni.

Sulemāni Bohorās do not differ much from the Dāudi Bohorās with whom they associate but do not intermarry. They are a small class. They have almost given up the Gujarāti Bohora dress and turban. Their home language is both Gujarāti and Hindustāni and they have begun to marry with Sunni Musalmans. Their high priest lives in Najran in the Hejas in Arabia ; they have taken to English education and some of them are barristers, engineers and doctors.

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Alias

Alia Bohorās take the name from Ali, who founded the sect in A.D. 1624. He was the son of Ibrahim, one of the sons of Shaikh Adam, the head Mullāh, who passing over his sons, appointed one Saikh Tayyib as his successor. Like Sulemānis, Alias do not intermarry with Dāudis but do not differ from them in appearance and customs.

Jaafri

Jaafri Bohoras are a section of the trading Bohoras, who became Sunni on the advent of Muzaffar I, as Governor of Gujarāt in A.D. 1391. They kept up their marriage relations with the Dāudi section until their connection was severed by a saint named *Sayad Jaafri Shiraji* who converted them to Sunni faith and from whose name, they are called Jaafri. They are also called *pātani* from Pāṭan, their head-quarters. Because they are sunnis, they are also known as *badi jamāt,* the large body, and as *chār yāri* or believers in the Prophet's four companions, *as-hābs.* Except the Surat Sunni Bohoras who intermarry with all classes, Jaafris marry only among themselves and celebrate their marriage without any procession. They have no special religious head, but many follow spiritual guides. Each settlement has its headman and forms a fairly organised body.

Naghoshis.

Naghoshis or non-fleshites who are also known as rotias means bread-eaters form an almost extinct section founded in A.D. 1789 by a member who held certain peculiar doctrines prominent among which was that to eat animal food was sin.

Sunni Muslims

There is nothing particularly distinctive about the social customs and manners as well as religious beliefs of the Sunni Muslims of Surat. They are practically the same as those described in Broach District Gazetteer.

PART IV-ECONOMIC ORGANISATION

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CHAPTER 4—GENERAL ECONOMIC SURVEY

INTRODUCTION

IT IS INTENDED TO DEVOTE this part to a fairly detailed account of the main features of economic life in Surat district. The following chapters, therefore, deal at some length with subjects like agriculture, industry, trade and commerce, miscellaneous occupations, finance and transport and communications in the region. An attempt is also made to give a broad idea of the standard of life of the people both in rural and in urban areas and to indicate the potentialities of further development in the future by drawing particular attention to those natural resources and peculiarities of the district in which it enioys a position of advantage. The brief survey of economic aspects contained in this chapter would serve as an introduction to the more detailed study which follows in subsequent chapters.

POPULATION

The population of Surat district was 6,14,198 in 1881 and 18,27,842 in 1951. The percentage increase over the period of 70 years (1881-1951) is 197.5, part of which is to be accounted for by integration of some former Indian States with the district in 1949. While the total population of the district has increased by 197.5 per cent during 1881-1951, the percentage increase in rural and urban population during the same period has been 201.7 and 183.1 respectively. A study of the rural and urban population percentages to total district population during this period indicates that there has not been any consistent trend either towards urbanisation or ruralisation in the district as a whole. The agricultural classes, according to 1951 census returns, still constitute 61.2 per cent of the total population. The number of towns has however, increased from 4 in 1881 to 15 in 1951; of them 8 belonged to the former Indian States which were merged in the district. The important towns of the district are: Surat, Bulsar, Bardoli, Vyara, Bilimora, Navsari and Bansda. The growth of Surat is due to its being an administrative, trading, educational and small-industries centre. While cotton trading has mainly led to the growth of Bardoli, trading in timber and forest products, fruits and vegetables have influenced the growth of other towns.

Of the total district population of 18,27,842 in 1951, 4,61,377 were self-supporting presons, 2,65,290 earning dependants and

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11,01,175 non-earning dependants, The agricultural class i. e. those depending on agriculture as the principle means of livelihood) numbered 11,17,900. Among these, self-supporting persons were 2,71,433, earning dependants 2,03,579 and non-earning dependants 6,42,888. The percentage-wise break up of the agricultural class was as follows:—(1) cultivators of land wholly or mainly owned and their depednants: 34.7 (ii) cultivators of land wholly or mainly unowned and their dependants: 11.1 (iii) cultivating labourers and their dependants: 14.6 (iv) non-cultivating owners of land, agricultural rent-receivers and their dependants: 0.8. The non-agricultural class (i. e. those whose principal means of livelihood were pursuits other than agriculture) numbered 7,09,942 and were composed of 1,89,944 self-supporting persons, 61,711 earning dependants and 4,58,287 non-earning dependants. The percentage-wise break up of this class was as follows—(i) production other than cultivation: 14.8 (ii) commerce: 6.7 (iii) transport: 2.4 and (iv) other services and miscellaneous sources: 14.9.

CULTIVATED AREA

Of the total area of 26,25,792 acres (1953-54), the cultivated area covers 16,62,289 acres i.e. 63.3 per cent. About 12.7 per cent of the district's total area is under forests. Forests are mainly located inehe talukas of Dharampur, Bansda, Vyara, Songadh and Mandvi. Almost the whole of the forest area falls under 'reserved' forests.

The average annual rainfall of the district is about 57", the variation being from 35" to 82". The areas of plentiful rains are Pardi, Gandevi, Dharampur, Chikhali, Bulsar and Bansda. The rainfall increases as one proceeds from the coastal plain towards the hilly tract in the east. It also increases from North to South. While Olpad, near the coast in the extreme north-west of the district, gets the lowest rainful of 35", the hilly area near Dharampur gets the highest annual rainfall of about 82".

In 1953-54, the total gross cropped area, as recorded, was 17,48,854 acres and the total net area under irrigation was estimated at 27,843 acres. Lands are irrigated in almost all the talukas except Olpad taluka. Moreover, the talukas of Kamrej, Navsari, Gandevi, Chorasi, Palsana and Bardoli have larger areas under irrigation than other talukas and together account for about 72 per cent of the total irrigated area of the district. The crops of the district that are irrigated are mainly rice, wheat, khariff jowar, sugarcane, cotton, tobacco, chillies, ginger and turmeric. Of the total irrigated area nearly 79.2 per cent was under well irrigation The remaining area was served by tanks, canals and lift-irrigation schemes. The Kakrapar project, one of the important irrigation schemes of the district, is expecte to produce when completed, annually an additional quantity of 1,60,000 tons of food grains and 16,000 tons of cotton and to make available irrigation facilities for 6,51,662 acres of land.

CULTIVATED AREA

Soils.

Four types of soils are traceable in the district viz., black cotton soil, light soil, gorat soil and khar lands. Black cotton soils, covering an area of 14,29,000 acres, are well suited for the cultivation of cotton. The other crops grown on this oil are jowar, paddy, fruit crops and vegetables. Light soils which cover an area of 8,82,000 acres, are very shallow and sandy and hence poor in fertility. Coarse paddy and inferior milets are grown on these lands. Gorat soils which cover an area of 80,000 acres are quite deep and fertile. They are very much suited for the cultivation of vegetables and garden crops. Khar lands cover an area of 1,44,000 acres and are almost barren. Efforts are therefore, being made to reclaim these khar lands for agricultural cultivation.

Crops.

The district grows in abundance both food and non-food crops. Nearly 53.4 per cent of the total gross cropped area is under food crops. The main food crops of the district are rice, jowar, *ragi* and *kodra* among cereals; *val*, *tuver* and *adad* among pulses; fruits and vegetables; sugarcane and chillies among condiments and spices. The main non-food crops is cotton which alone accounts for 2,95,562 acres of land. Cotton in fact dominates the rural economy of the district. The other non-food crops are groundnuts and castor-seed among oilseeds, tobacco and grass as fodder.

Forests.

Forests account for 3,34,408 acres i.e. 12.7 per cent of total district area. The major portion of this area is in charge of the Forest Department and the rest in charge of the Revenue Department. While the former yields large and medium sized timber and poles, firewood and charcoal, the latter grows only minor cereals and other minor crops. The minor forest produce are bidi leaves of *Asotri*, chilar bark, gums of various types, etc.

Holdings.

In 1952-53 the large majority of holdings were in the acre group of less than 5 acres, the holders in this category being 64.4 per cent of total number of landholders and accounting for only 19.2 per cent of total area under holdings. The other details were as follows:—The acre group holding 5 to 15 acres accounted for 23.3 per cent of total landholders, holding in total 25.1 of total area under holdings and that holding 15 to 25 acres, accounted for 7.2 per cent of total landholders, holding in total 18.1 per cent of total area under holdings. The rest were bigger holders.

TENANCY

The Bombay Tenancy and Agricultural Lands Act of 1948 has been enacted to give security of tenure to tenants. The Act had fixed the maximum rate of rent at one-third and one-fourth of the total crop in the case of non-irrigated lands and irrigated lands respectively by an amendment in 1953-54 and to one-sixth still later. Now the valuable right in favour of the protected tenants has been conferred by the Act in the form of the privilege of purchasing his holdings from his landlord under certain condi-

tions by the last amendment of the Act whereby such tenants have become owners with effect from April, 1957. This law is expected to bring about a more even distribution of land in the district.

IMPLEMENTS ETC.

The position about implements, livestock, wages and famines is as follows: (i) Implements:—The main agricultural implements used in the district are indigenous types of wooden ploughs and harrows, seed drills, water lifts either of iron or leather and other miscellaneous tools such as axe, pick-axe, spade, etc. Recently however, iron ploughs have been introduced in the district and tractor ploughing has made its appearance. A fleet of tractors is also maintained by the Department of Agriculture, which undertakes the work of ploughing. Water-lifting pumps have come to be used in the district. But all these modern movements have not made much headway. (ii) Livestock:- Livestock is a valuable asset for the farmer. According to 1956 cattle census of the district, there were 6,01,487 cow class cattle; 1,91,871 buffalo class cattle; 28,410 sheep; 2,10,562 goats; 3,724 horses and ponies; 1,352 donkeys; 131 pigs and 7,61,416 poultry in the district. When compared with the livestock figures as given in the old Gazetteer this indicates an appreciable increase in the livestock population of the district. Almost all talukas of the district have a veterinery hospital for the care of this livestock population and efforts are also being made to upgrade the cattle. (iii) Wages:— Agricultural labourers are paid both in kind as well as in cash. Most of the heavy work is done by men and female labour is employed for lighter work. The daily wage of male worker varies from Rs. 0-12-0 to Rs. 1-8-0 and that of female labourer from Rs. 0-6-0 to Rs. 1-4 0. (iv) Famines:—The district is not generally susceptible to famines and scarcities and has witnessed very few famines and scarcity years so far.

INDUSTRIES.

According to 1951 census, 2,70,600 persons were employed in industries. The important industries of the district are: brass cock, bobbins and textile accessories, cotton textiles, chemicals and pharmaceuticals, ginning and pressing, gold and silver thread, paper and paper boards, saw milling, silk and art silk and general engineering. In 1953, there were nearly 206 registered factories in 19 industries in the district. The sugar industry has made its appearance very recently and is organized on a co-operative basis. The other growing industries of the district are brass cock making, general engineering and wire drawing. Moreover, some of the district industrial products have their names both in national as well as in international markets. The industrialization of the district is expected to get a momentum after the completion of Udhna Industrial Estate Project.

Among the village industries, mention may be made of brick manufacturing, cane and bamboo-work fishing, khadi, pottery, tanning and leather-work. The significance of khadi industry in the village economy is due to the fact that it provides

General Economics Survey.

part time .employment to many agriculturists. The formation of co-operatives is common to almost all industries and some of the industries are encouraged by starting training schools at appropriate centres by Government.

LABOUR

There has been an appreciable increase in the number of trade unions since 1945. In its initial stages, the trade union movement was restricted in its nature and was confined to very few industries. At present, it covers almost all industries. The total membership of 32 trade unions in 1954 was 11,406.

MISCELLANEOUS OCCUPATIONS

A large number of persons are engaged in occupations such as bakeries, *farsan* and sweetmeat shops, hair-cutting saloons, hotels and restaurants, laundries, tailoring, etc. Bakery products as well as *farsan* and sweets are marketed even outside the district.

FINANCE

Since the publication of the old Surat District Gazetteer, the volume of trade in the district has increased appreciably and significant changes have taken place in the agencies employed in financial operations. Co-operative societies at present constitute an important financial agency. The first co-operative society was registered in 1906 and was organized on Raiffeissen model. Since then, the co-operative movement, encouraged by various acts, has made much progress. Agricultural co-operative credit societies, multipurpose societies and land mortgage banks are ocnfined to agricultural sector. The fourth type of societies namely, non-agricultural co-operative credit societies are mostly urban societies, supplying credit to members who are generally traders, artisans, factory workers, salary earners, etc. residing in towns. The fifth is the central financing agency, namely, Surat District Co-operative Bank Ltd.

The statistical information about these societies for 1956-57 was as follows :—There were 424 agricultural credit societies with a total membership of 66,584, a share capital of over Rs. 23 lakhs and a working capital of more than one crore of rupees. They had deposits of Rs. 38.5 lakhs. The multi-purpose societies were 184 in number with a total membership of 50,175, share capital of more than Rs. 15 lakhs and working capital of more than 79 lakhs. Their total deposits stood at Rs. 29.3 lakhs. There was only one land mortgage bank with membership of 1,088 share capital of nearly Rs. two lakhs and working capital of Rs. 5.7 lakhs. The Surat District Co-operative Bank Ltd, established in 1909, is the central bank of the district. In 1956-57i ts membership was 4,397 individuals and 679 societies, share capital of Rs. 8.4 lakhs and working capital of Rs. 3.4 crores. It advanced loans worth Rs. 2.4 crores and had deposits of Rs. 3.2 crores.

This progress in the field of co-operation has also affected the monopolistic position of moneylenders in the district. On Ju y 31, 1956, licensed moneylenders numbered 99 and the amount jo loans advanced by them stood at Rs. 25.2 lakhs. At present,

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FINANCE

moneylending is done only by moneylenders registered under the Bombay Moneylenders Act (XXXI of 1946) which was further amended in 1951. Their operations are thus regulated and controlled under the Act.

Joint stock banks come next. In 1955, there were in the district 18 offices of nine joint stock banks; of them only one had its registered office in the district. The total deposits held by these banks stood at Rs. 5.5 crores in 1952 and Rs. 5.9 crores in 1953. Their total advances amounted to Rs. 72.6 lakhs in 1952 and Rs. 74.4 lakhs in 1953.

Recently Government have liberalized their policy of advancing loans to agriculturists in the form of Tagai. In 1956-57 the amount sanctioned and actually disbursed as tagai was more than one lakh of rupees. Schemes worked out by the Department of Cottage Industries and Industrial Co-operatives and aiming at giving loans to small industries, individual artisans, educated unemployed, etc. are also functioning. In recent times the handloom industry is also given financial assistance to improve its prospects. Small saving in considerable amounts and in various forms is a notable feature of the financial life of the district. In 1957, there were 192 post offices in the district doing savings bank work. There were some 62,164 accounts and the total amount invested was Rs. 1.8, crores. At present, three types of certificates are open for investment by the public, namely 12 year National Plan Savings Certificates, 15-year Annuity Certificates and 10-year Treasury Savings Deposit Scheme. A substantial amount has been invested in them.

TRADE

According to the census of 1951, trade and commerce provided the primary source of livelihood to 1,22,450 persons i. e. 6.6 per cent of the total population and secondary means of livelihood to 10,575 persons.

Retail and wholesale trade in foodstuffs alone (in 1951) provided employment to 13,730 persons i. e. 46.1 per cent of total of 29,066 self supporting persons employed in all trades. Wholesale trade in commodities other than foodstuffs gave employment to 621 persons. Retail trade in textile and leather goods engaged 5,438 persons (18.7 per cent); retail trade in fuel 1,703 persons (5.9 per cent ;) money-lending, banking and other financial business 1,688 persons (5.8 per cent) and retail trade otherwise unclassified 6,124 persons (21.1. per cent).

The three important characteristics of the district trade pattern are : (1) concentration of traders in retail trade, (*ii*) overwhelming number of retail traders in foodstuffs, textile and leather goods and (iii) prominence of independent workers.

The district is rich in garden crops such as mangoes, plaintains, chikus, etc. and also in the production of an important cash

TRADE

crop, namely, cotton. The yearly output of cotton (average of 1943-44 to 1952-53) in the district came to 77,235 bales. The district has a prosperous trade in cotton which is mainly consumed by local, Ahmedabad and Bombay cotton mills. Similar export trade exists in other commodities, namely, timber, fruit crops such as mangoes and plantains, *val*, jowar, gur and paddy. The important trading centres of the district are Surat, Navsari Bulsar, Bardoli, Vyara, Bilimora and Amalsad.

There is only one regulated market in the district viz.,The Agricultural Produce Market Committee, Surat, for regulation of buying and selling practice of agricultural produce, namely, vegetables, fruits, condiments and spices.

On an average the number of shops per village comes to three, though the talukas of Valod and Gandevi have the high average of ten and nine shops per respectively village. The total number of bazars held in the district comes to 97 and the value of the total turnover at each of these bazars varies from Rs. 50 to Rs. 7,000. The number of persons attending them varies from 200 to 3,000. A large number of fairs associated with deities and religious festivals are also held, though with growing industrialization, the importance of such fairs has tended to decline. They serve the purpose of distributing centres for articles varying from bare necessities to luxuries and last for a day or two. The attendance at a fair varies from 200 to 60,000 persons and sales from less than Rs. 100 to as much as Rs. 75,000. Pedlars in rural areas and hawkers in town also form a connecting line between rural consumers and the traders in towns. They deal in a variety of goods and their activities have come to be regulated in some of the towns of the district.

About 14,000 dealers were reported to be operating in the district in 1953 (i. e. as defined in the Sales Tax Act) and their turnover came to more than Rs. 53 crores. This turnover, however, does not represent the turnover of all traders because 'dealers' as defined by the Act are generally fairly big traders having a turnover of more than Rs. 30,000 a year. Thus a large number of petty traders are excluded from the returns.

There is one central organisation, the Surat Chamber of Commerce, representing trade and industry of the district and several trade associations are affiliated to it. Since its establishment in 1941, it has rendered valuable assistance to various indusries of the district.

TRANSPORT.

Vast improvements have taken place in the transport system of the district both in regard to railways and roads since the old Surat District Gazetteer was compiled. The whole district has 217.25 miles of railway (140 miles broad-gauge and 77.25 miles narrow-gauge) with 49 stations. In 1952-53 some 74,42,796

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TRANSPORT.

passengers and 5,50,936 tons of goods were booked from these stations. The employment provided by the railways in the district has increased substantially from 591 in 1881 to 3,552 in 1951.

The road system has also developed a great deal. Roads are now classified into four categories namely, national highways, state highways, major district roads and other district roads. The Bombay Ahmedabad Delhi National Highway No. 8 runs through the district and covers over a hundred miles. Some six state highway roads also pass through the district. Besides these, the district is well served by other district and municipal roads. These roads connect the district with all the neighbouring districts. In 1951, roads gave employment to some 3,085 persons. In important centres, the state government maintains traveller's bungalows, inspection bungalows, district bungalows and departmental (P. W. D. and Forest) bungalows.

In 1947, the Government of Bombay decided to nationalize road transport. As a result of this, the Bombay State Road Transport Corporation came into existence. In accordance with this policy, motor transport in the district was nationalized in 1953 and is now administered by the Divisional Controller of the Surat Division which covers the entire Surat district and partly Broach, Dangs and Thana. It was calculated that in December 1953, there were as many as 76 routes (in the division) with a daily average of 1,225.3 route miles and 19,251 passengers. The Corporation maintains workshop, depots and sub-depots in the district and its working is aimed to maximise social gain. In 1953, it made a beginning in goods transport also.

The district has seven ports namely, Surat, Bulsar, Bilimora, Navsari, Matwad, Umarsadi and Bhagwa. The main items of imports are sugar, cement, iron, steel, wet dates, ghee, manglore tiles and those of exports are wood, timber and pulses. While imports come from Saurashtra ports, Bombay and Dahanu exports go to Saurashtra ports, Bombay and Ratnagiri.

In the matter of posts and telegrams, the district is well served. There are two head offices (one being city head office) 29 combined offices, 42 sub-offices and 291 branch offices in the district. The telephone system in the district is efficient in its working. Radio sets are also being increasingly used by the people and the total number of licenses issued stood at 8,821 in 1953.

PROSPECTS.

Surat district with its fertile soil, specialized banking services for industries, growth of industrial co-operative organizations, artisans well known for adaptability and business acumen, enterprising nature of the people and with the growing development of an industrial estate at Udhna, Surat port and Utran Electric Grid scheme seems to have a bright future.

CHAPTER 5.—AGRICULTURE AND IRRIGATION

AGRICULTURAL POPULATION.

AGRICULTURE IS THE PREDOMINANT OCCUPATION in Surat district and the census figures of 1951 show that it provides means of livelihood to 61.15 per cent of the district's total population. The decennial census figures for the past seventy years, owing to changes in methods of enumeration and classification do not provide a consistent record, from decade to decade of all the changes in the structure of the population actually engaged in agriculture. These changes have to be gauged from the figures of population given in the Census Reports under the head "Rural", which include not only persons enaged in agriculture and allied occupations but also those engaged in definitely non-agricultural occupations. These figures show that during the past seven decades, there has been greater increase in the rural population than the urban population. This is illustrated by the following table :—

TABLE No. 1

SURAT POPULATION : RURAL AND URBAN (1881-1951)

Year	Total Population	Rural		Urban	
		Numbers	Percentage of the total Population	Number	Percentage of the total Population
1881 ...	6,14,198	4,76,965	77.65	1,37,233	22.35
1891 ...	6,49,989	4,94,125	76.02	1,55,864	23.98
1901 ..	6,37,017	4,71,864	74.07	1,65,153	25.93
1911 ...	6,54,109	5,05,115	77.22	1,48,994	22.78
1921 ...	6,74,351	5,15,374	76.42	1,58,977	23.58
1931 ..	6,93,613	5,51,101	79.44	1,42,603	20.56
1941 ..	8,81,058	6,60,958	75.01	2,20,100	24.99
1951 ..	18,27,842	14,39,191	78.73	3,88,651	21.27

During the period 1881-1951, the total population increased from 6, 14, 198 to 18,27,842 which means an addition of 12,13,644 that is an increase by 197.5% during seventy years. This addition, however, is partly due to the merger of certain Indian States in the district in 1949. During the period the population has in-

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CHAPTER 5.

Agriculture and Irrigation.

AGRICULTURAL POPULATION

creased from 4,76,965 to 14,39,191 i.e., by 201.7 per cent. Increase in the rural population has outpaced the increase in the total population. And as a natural consequence, the increase in the urban population is proportionately less. The urban population increased from 1,37,233 in 1881 to 3,88,651 in 1951 i.e., the increase is only by 183.1 per cent.

As is evident from the figures of urban population, there has been increasing urbanisation of the district during the past seventy years. Going by census figures alone, the rise has been from 1,37,233 in 1881 to 3,88,651, in 1951 i.e., a rise of 183.1 per cent. But this is due partly to the inclusion of towns in the merged areas and partly to the growth in the population of older cities rather than to the emergence of new towns or cities.

All the talukas in Surat district, except Chorasi Taluka, are predominantly rural in nature. According to the census of 1951, the rural population of the district has been divided among various talukas as follows :—

TABLE No. 2

RURAL POPULATION: SURAT DISTRICT (TALUKAWISE) 1951

Taluka or Peta	Males	Females	Total	Percentage of the total Population of the taluka to peta
Bansda	30,672	28,838	59,510	93.03
Bardoli	30,611	30,624	61,235	78.22
Bulsar	56,048	56,470	1,12,518	81.55
Chikhali	60,983	62,889	1,23,872	100.00
Chorasi	54,267	54,636	1,08,903	31.20
Dharampur .. .	55,299	51,714	1,07,013	95.45
Gandevi . ..	41,386	42,932	84,318	77.09
Kamrej	23,090	23,725	46,815	90.17
Mahuwa	21,087	27,064	54,151	100.00
Mandvi	34,688	33,038	67,726	90.05
Mangrol	38,161	36,041	74,202	100.00
Navasari	72,157	82,345	1,54,502	77.57
Olpad	31,813	32,755	64,568	100.00
Palsana	17,510	17,864	35,374	100.000
Pardi	54,772	55,864	1,10,636	100.00
Songadh	30,694	28,353	59,047	95.38
Valod ...	18,338	17,841	36,179	100.00
Vyara	40,367	38,255	78,622	87.40
Total ...	7,17,943	7,21,248	14,39,191	778·73

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AGRICULTURAL POPULATION

The taluka of Chorasi is overwhelmingly urban and its rural population is only 31.20 per cent of the total population. This taluka includes the towns of Surat, Rander and Variav and is noted for its commercial and industrial activities. On the other hand, the seven talukas of Chikhli, Mahuva, Mangrol, Olpad, Palsana, Pardi and Valod are entirely rural. The remaining talukas of Bansda, Dharmpur, Kamrej, Mandvi, Songadh, Vyara, Bardoli, Bulsar, Gandevi and Navsari, are predominantly rural, the percentage of rural population to the total population varying from 77.09 per cent in Gandevi to as high as 95.45 per cent in Dharampur.

As already stated, in the absence of comparable data, changes in the population actively engaged in agriculture for their livelihood cannot be presented from decade to decade. However, the 1951 census gives the following figures in regard to the number of people engaged in agriculture and in various allied occupations:—

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AGRICULTURAL POPULATION.

TABLE NO. 3

POPULATION ENGAGED IN AGRICULTURE, SURAT (1951)

	Self Supporting Persons		Earning Dependents		Non-earning Dependents		Persons followining other professions as their main occupation but deriving secondary income from Agriculture	
	Males	Females	Males	Females	Males	Females	Males	Females
	1	2	3	4	5	6	7	8
Cultivators of land wholly or mainly owned and their dependents	1,28,658	14,664	31.461	72,056	1,56,005	2,30,587	15,956	36,393
Cultivators of land Wholly or mainly unowned and their dependents	41,551	3,054	12,932	34,027	48,092	62,571	10,356	11,713
Cultivating labourers and their dependents ..	59,792	19,793	12,087	40,109	58,687	76,734	38,031	88,196
Non-cultivating owners of land, agricultural rent receivers, and their dependents...	2,499	1,422	408	499	3,680	6,532	804	263
All Classes	2,32,500	38,933	56,888	1,46,691	2,66,464	3,76,424	65,147	1,36,565

TABLE No. 4

PERSONS ENGAGED IN ALLIED AGRICULTURAL OCCUPATIONS, SURAT, (1951)

	Employers		Employees	
	Males 1	Femles 2	Males 3	Females 4
Plantation	14	—	130	2
Forestry and wood cutting ...	22	—	593	47
Stock Raising	71	4	417	25
Rearing of small animals and insects	—	—	21	—
All classes	107	4	1,161	74

	Independent workers		Total	
	Males 5	Females 6	Males 7	Females 8
Plantation	100	27	244	29
Forestry and wood cutting ...	1,161	57	1,776	104
Stock Raising	1,982	174	2,470	203
Rearing of Small animals and insects	185	13	206	13
All classes	3,428	271	4,696	349

Agriculture is the main source of livelihood to 11,17,900 persons, including self-supporting persons and their dependents both earning and non-earning, besides providing subsidiary occupation to a fairly large number of other persons. In the tables given above are included persons engaged in agricultural cultivation, landowners, cultivating and non-cultivating, garden cultivators, labourers, forest workers and persons engaged in rearing, breeding of and dealing in livestock. The majority of workers on land are the cultivating owners (6,33,431) who work on their own farms ; agricultural labourers, (2,67,202) who work on other people's farms for wages in cash or kind, are probably the next most numerous class; and tenant cultivators (2,02,227) come third. The non-cultivating owners of land (15,040) usually give out their lands to tenant cultivators on rent.

The remaining include 273 engaged in plantation, 1,880 forest labourers who collect wood fuel, and burn firewood for charcoal, 2,673 persons engaged in stock raising and lastly, 219 persons engaged in rearing of small animals and insects. Persons engaged in livestock business usually keep good quality cattle, buffaloes and transport animals. They also keep sheep, goats and poultry.

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RAINFALL

Rainfall naturally plays an important role in determining the timing of agricultural operations like sowing, harvesting etc. The district receives its rainfall entirely from the Arabian sea branch of the monsoon current. The south-west monsoon sets in by about the end of the second week of June and continues till the end of September. The annual average rainfall of the district has been estimated at 57". About 95 per cent. of the annual rainfall occurs from June to September. The monsoon withdraws towards the end of September.

The table below gives an idea of the average rainfall recorded and number of rainy days at the rainfall recording centres in Surat district :—

TABLE No. 5

STATEMENT SHOWING RAINFALL * IN SURAT (AVERAGE OF 6 YEARS AND ABOVE UPTO 11 YEARS)

Rainfall Recording Station	Ante-Monsoon (May)	South-West Monsoon (June to Sept.)	South-West Monsoon (Oct. to Nov.)	Total Rainfall @	Total Number of Rainy Dasy.
1	2	3	4	5	6
Bansda . .	00.00	71 14	3.39	74.89	87
Bardoli	00.24	51.26	1.89	53 39	70
Bulsar	00 42	73.75	3.52	77.69	76
Chikhai .	00 27	72.84	2 30	75 41	80
Chorasi (Surat) ...	00.53	40 59	2.14	43.21	62
Dharampur ...	00 00	79.42	3 03	82 46	66
Gandevi . .	00 00	77.49	2.23	79.72	71
Jalalpore . . .	00.87	52.18	2 56	55.61	74
Kamrej	00.00	42.83	1.03	44.07	53
Mahuwa	00 00	53 01	1.24	54.25	68
Mandvi	00.26	55 29	3.19	58 74	67
Mangrol	00.03	40.73	1.07	41 83	60
Navsari	00.00	49.47	1.31	50.78	68
Olpad	00.55	33.58	1.90	35 05	55
Palsana	00 00	52 94	1 18	54.12	67
Pardi	00.46	75.01	1.85	77.61	88
Songadh	00.00	53.68	1.17	54.85	75
Valod	00.18	58.27	1.75	60.10	75
Vyara	00.00	56.25	1.14	57.39	73

It is evident from the above table that the rainfall in the district increases as one proceeds from the coastal plain towards the hilly tract in the east. It also increases from north to south. Olpad, near the coast in the extreme north-west of the district gets the lowest rainfall of 35" while the hilly area near Dharampur gets the highest annual rainfall of about 82".

*In inches and cents.

@ The figures of total rainfall include these showers received during the months not covered in the columns one to three: hence it is in excess to that extent over the total of these three columns.

AGRICULTURAL SEASONS.

All cultivable lands in the district come under one of the two main categories, namely *jirayat* (dry crop land) and *Kyari* (irrigated land). There are about two lakh acres of land which come under the *Kyari* type and the rest under the *jirayat* one. Dry crop lands, because of their dependence on monsoon, are further divided into *kharif* (early monsoon) and *rabi* (late monsoon). The *Kharif* crops are brought to maturity by the rains of south west monsoon whereas the *rabi* crops depend on dew, irrigation and the occasional fair weather showers which fall between October and May.

There are three main agricultural seasons, namely the *kharif*, the *rabi* and the hot weather seasons.

The *Kharif* season, which commences by the middle of June and terminates by the middle of October, draws its rainfall chiefly from the south-west monsoon. Almost 95 per cent of the annual rainfall of the district is received during the *kharif* seaosn. The rainfall on the whole is fairly evenly distributed. The main *kharif* crops are cotton, *rugi*, *Kodra*, *Adud*, bajri, jowar, paddy and *tur*. The sowing and reaping of these crops roughly coincide with the commencement and termination of the monsoon The *kharif* crops are generally sown from the middle of June to the middle of July and are generally reaped from the last week of September to the first week of October except crops like jowar and *tur* which are harvested by the middle of January. Cotton, which is sown as a *kharif* crop in June is not picked till the last week of March.

The *rabi* season commences in the middle of October and terminates in the middle of February. The rainfall it receives is chiefly from the receding south-west monsoon and is always very scanty. The *rabi* crops are brought to maturity by these rains and the moisture retained by the land during the *kharif* season. They are chiefly wheat, gram, *val*, and castor seeds which are generally sown in the months of October and November and are reaped in February and March.

The third agricultural season, i.e. hot weather season which commences from the middle of February and terminates by the middle of June, is not a very important one. During this season, only vegetable and fodder jowar are grown and that too under irrigation. Sown in the beginning of April, these crops are harvested in the last week of May or the first week of June.

SOILS.

In Surat district, four types of soils are found namely *khar* lands, black cotton soil, light soils and *gorat* soil. The first three lie parallel to the sea coast line, *khar* lands followed by black cotton and light soils. The gorat soils are found on the banks of the rivers passing through the district. All the four soil of the district have been formed from the alluvial deposits.

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Agriculture and Irrigation.

SOILS

The follwoing table shows the physical characteristics and chemical analysis of the soils of the district, except *khar* land soil :—.

TABLE No. 6

SOILS OF SURAT DISTRICT

	Black cotton soil	Gorat soil	Light soil
Physical characteristics			
Depth	More than 40'	20' to 40'	3' or less
Colour	Black	Blackish	Light
Texture...	Clay	Loam	Sandy
Chemical analysis in percent			
Moisture	6.0- 6.5	4.0- 4.5	3.5
Loss on ignition	7 0- 7.5	4.0- 4.5	6.2
Acid in soluble-Silica ...	68.0- 2.0	69.0-71.0	--
HCL Sol. Cao ...	0.7- 1.0	0.4- 0.6	0.2- 0.5
HCL Sol. Mgo ...	0.9- 1.0	0.6- 0.7	—
HCL Sol. K2o ...	0 21- 0.29	0.09- 0.17	0.21- 0.29
HCL Sol P205 ...	0.04- 0 07	0.04- 0.08	0.04- 0.07
Nitrogen	0.04- 0.07	0.04- 0.06	0. 0.08
Sand	24.0-30.0	61.0-63.0	78.0
Silt	31.0-38.0	18.0-20.0	10.0-12.0
Clay	32 0-37.0	15.0-20.0	6.0- 7.0
PH	8.0	8.2	7 5

Kali Jamin or black cotton soil is the most extensive among the soils found in the district. It comprises an area of 14,29,000 acres in the middle strip of the district varying in width at places from 25 to 30 miles. This soil is mainly found in Kamrej, Palana, Bardoli and Gandevi talukas ; and partly in Pardi, Bulsar, Chikhai, Navsari, Chorasi, Olpad, Mangrol, Mandvi, Valod and Mahuwa, talukas.

Black cotton soils which are known for their fertility and cotton production are formed from alluvial deposits of rivers in the district and are about 30 to 40 feet deep. Due to its high silt and clay contents, this is very retentive of moisture and cracks very heavily in winter and summer. Lands under these soils are generally not ploughed evey year, but are harrowed twice-or-thrice as preparatory tillage. They are ploughecd with tractors once in ten or fifteen years just to eradicate weeds with which they get highly infested during the period. Black cotton soils are mostly flat with a very gentle slope either from east to west or towards the river side.

Besides the chief crop cotton, other crops that are grown on black soils are jowar, paddy, fruit crops likes mangoes, *chikus* and bananas and various vegetables. About two lakh of acres under this soil are the *kyari* lands, which are irrigated from wells and tanks, and are chiefly sown with finer types of paddy, namely, 2-31, *Nawabi Kolam* etc. The per acre yield of these varieties of paddy grown in *kyari* black cotton lands has been estimated at 2,000 lbs. as compared to yield in dry black lands

where it is estimated at 1,500 lbs. per acre only. In black cotton soil the yield of seed cotton per acre comes to 400 lbs. and that of jowar to about 800 lbs. per acre.

Soils

Halki Jamin.

Halki jamin or light soil lies on the eastern hilly areas and along the slopes of the district. This soil covers an area of 8,82,000 acres in this district and is found in the eastern hilly areas of Songadh, Vyara, Bansda and Dharampur talukas. Light soils are very shallow and sandy in nature, hence poor in fertility. The depth of this soil varies from 9" to 3' at places. Lands under this soil are slopy. The main crops that are grown on lands under light soils are coarse paddy and inferior millets like *kodra, nagli, varai, sawa* etc. The yield per acre of paddy in this soil comes to about 800-1200 lbs. and that of inferior millets about 300-500 lbs.

The areas where these light soils are found are mostly inhabited by scheduled tribes and backward classes who are not much interested in improving the lands by methods of checking soil erosion or by enriching the soils by application of manures. Recently, the State Government has proposed to carry out counter bunding in these areas.

Gorat Lands.

Goradu jamin or the *gorat* soils are found on the banks, half a mile on each side, of the seven main rivers in the Surat district, all running from east to west to meet the Arabian sea. This soil covers an area of 80,000 acres of land in the district.

The *gorat* soils are quite deep and fertile. They have less of silt and clay as compared to black cotton soils; yet they are very much suited for the cultivation of vegetables and garden crops. The main crops grown on lands under *gorat* soils are all varieties of vegetables, root crops like *suran*, yam etc. and fruits like banana, mangoes, *chikus* etc. At some places, irrigated cotton (170-co2) is also grown and its yield per acre has been estimated at about 1,200 lbs. The yield of bananas has been estimated at about 500 bengali maunds per acre, while that of vegetables and the other crops depends on the season and time. An interesting fact which has been noticed is that there are a number of irrigation wells in the *gorat* lands that are fitted with oil engies which help a good deal in reaping a good harvest.

Khar lands.

Khari Jamin (*Khar* lands): The strip of land on the sea coast, about 1-2 miles wide, has the *khar* land soils which are, though very deep, almost barren due to their high salt content. An area of 1,44,000 acres is under *khar* soils. These lands are situated mainly in the talukas of Olpad, Chorasi, Navsari and Bulsar, all lying on the Arabian sea-coast.

An effort has been made by the State Government to reclaim these *khar* lands for argicultural cultivation. Three such schemes have been completed in the district and 2407 acres of land have been

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Agriculture and Irrigation.

SOILS

reclaimed at an estimated cost of Rs. 67,674. The details of these three schemes have been shown in the following statement :—

KHAR LANDS RECLAMATION SCHEMES IN SURAT DISTRICT

	Area covered in acres	Total estimated cost in Rs.	Cost per acre in Rs.
(1) Umrat-Vansi Nimlai (Taluka (Navsari).	1,644	15,998	10
(2) Delu (Taluka Chorashi) ...	215	8,178	38
(3) Bhagadu Khurd-Bhagadawad Kosamba (Taluka Bulsar) ...	548	43,498	80

The State Government have also sanctioned the following *Khar* land reclamation schemes in Surat district and the work is already in progess in some of them.

Location	Taluka	Area covered (acres)	Total Estimated cost (Rs.)	Cost per acre (Rs.)
1. Dadai	Navsari	7,452	1,86,380	25
2. Matwad	"	91,038	72,765	70
3. Danti-Bhatha	"	1,300	1,59,308	122
4. Parujan	"	416	53,100	127
5. Pinjarat	Olpad	200	11,318	57
6. Nesh	"	140	8,520	68
7. Pardi	"	193	9,882	49
8. Damka-Bhathi-Mora ...	Chorasi	409	12,013	29
9. Umber	"	437	61,637	141
10. Bhagai	Bulsar	2,500	2,05,747	82
11. Malwan	"	2,430	2,45,747	101

While these schemes are already in operation, the State Government is drawing up a plan to reclaim another area of 18,000 acres *Khar* lands. The crops that can be conveniently grown on *khar* lands are paddy in the *kharif* season and pulses like *val* and gram in the *rabi* season. After the area is reclaimed, it is expected that paddy will yield 800 lbs. per acre while *val* or gram may yield about 400 lbs. per acre.

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Agriculture and Irrigation.

LAND UTILISATION

There has been an increase in the total area of the district since the compilation of the last Gazetteer (in 1877), mainly because of the incorporation of territories belonging to the rulers of old Indian States in 1949. The total area in acres was 10,58,180 in 1874-75, 10,58,333 in 1848-49, 25,34,500 in 1949-50 and in 1953-54 it has been estimated at 26,25,792.

The table below gives a statement of cultivated and uncultivated areas in Surat District for the year 1953-54 :—

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LAND UTILISATION

TABLE NO. 7

STATEMENT SHOWING DETAILS OF CULTIVATED AND UNCULTIVATED AREAS IN SURAT DISTRICT.

1953–54: (IN ACRES)

Name of talukas	Number of villages	Total area cultivated and un-cultivated	CULTIVATED AREA					UNCULTIVATED AREA			
			Gross cropped area	Area cropped more than once	Net Area sown	Current Fallows	Total cultivated area	Forests	Cultivable wastes	Others	Total un-cultivated area
Bansda	95	1,48,234	75,304	1,836	73,468	—	73,468	57,104	691	16,971	74,766
Bardoli	89	93,691	90,308	8,998	81,310	—	81,310	—	160	12,221	12.381
Bulsar	92	1,25,909	1,02,325	9,000	93,325	1,101	94,426	2,214	5,044	24,225	31,483
Chikhali	85	1,34,970	1,27,702	11,449	1,16,253	—	1,16,253	365	594	17,758	18,717
Chorasi	123	1,41,485	94,828	507	94,321	—	94,321	2,128	359	44,677	47,164
Dharampur	242	4,09,585	1,23,925	14,031	1,09,894	2,244	1,12,138	76,846	1,39,157	81,444	2,97,447
Gandevi	57	70,237	50,169	5,591	44,578	—	44,578	463	7,626	17,570	25,659
Kamrej	70	93,811	82,613	2,038	80,575	263	80,838	—	—	12,973	12,973
Mahuva	66	87,515	74,085	4,471	69,614	—	69,614	6,370	—	11,531	17,901
Mandvi	159	1,78,985	1,11,388	8,299	1,03,089	5,399	1,08,488	46,090	—	24,407	70,497
Mapgrol	143	1,91,856	1,48,445	1,903	1,46,542	566	1,47,108	14,504	2,075	28,169	44,748
Navsari	140	1,81,686	1,25,675	9,288	1,16,387	233	1,16,620	17,393	13,576	34,097	65,066
Olpad	117	1,69,357	1,12,060	1,169	1,10,891	869	1,11,760	—	30	57,567	57,597
Palsana	50	49,639	45,928	1,498	44,430	—	44,430	—	—	5,209	5,209
Pardi	82	1,04,417	99,155	10,621	88,534	—	88,534	891	1,222	13,770	15,883
Songadh	197	1,93,685	1,11,650	4,384	1,07,266	5,553	1,12,819	53,769	1,394	25,703	80,866
Valod	44	49,983	47,553	3,638	43,915	420	44,335	458	52	5,138	5,648
Vyara	150	2,00,747	1,25,741	5,524	1,20,217	1,032	1,21,249	55,813	141	23,544	79,498
Total	**2,001**	**26,25,792**	**17,48,854**	**1,04,245**	**16,44,609**	**17,680**	**16,62,289**	**3,34,408**	**1,72,121**	**4,56,974**	**9,63,503**

Of the total area of Surat district in 1953-54 i. e., 26,25,792 acres, 16,62,289 acres were under cultivation and 9,63,503 acres were not under cultivation. The uncultivated area consisted of 3,34, 804 acres of forests, 1,72,121 acres of cultivable waste lands and 4,55,974 acres not available because occupied by river and buildings. The pereentage of cultivated to total area in the district as a whole comes to 63.30, but it varies from taluka to taluka, the highest percentage being 89.50 in Palsana and the lowest being 27.37 in Dharampur.

A fairly big area in the district is covered with dense forests. Forests account for 3,34,408 acres i. e. 12.74 per cent of the district to total area. The five talukas viz. Dharampur, Bansda, Vyara,Songadh and Mandvi together account for as much as 86.6 per cent of the district's total area under forests, each having more than 40,000 acres of land under forests, Dharampur having the highest in the district, namely 76,846 acres.

Almost the whole of the forest area in the district falls under "reserved" forests. The major portion of this area is in charge of the Forest Department and the rest in charge of the Revenue Department. The table below shows range wise distribution of forests in 1953-54 in Surat district.

TABLE No. 8

FOREST IN SURAT DISTRICT (1953-54)

Range	Talukas included in the Range	Reserved Forests		Unclassed Forests Area in sq. miles	Total Area of the Forests Area in sq. miles
		Incharge of the forest Department	Incharge of the Revenue Department		
1	2	3	4	5	6
Vyara	Vyara (part)	27.47	—	—	27.47
	Mahuwa (part)	2.75	—	—	2.75
	Valod	0.70	—	—	0.70
	Navsari	30.63	—	—	30.63
Mandvi	Mandvi	63.50	9.0	—	72.50
Tapti, Vajpur, Sadadvel, Nessu	Songadh	355.17	—	—	355.17
Dharampur	Dharampur (part)Chikhali	0.6	2.1	3.0	5.9
Kaparde	Dharampur (part)	—	—	300.00	300.00
Nanaphonda	Pardi Bulsar	1.4	0.9	—	2.30
Bansda	Bansda (part)	—	—	86.00	86.00
Unai	Vyara, Chikhali, Mahuwa, Bansda	99.89	—	—	99.89

The small forest area, which is under the control of the Revenue Department, is given out for cultivation and it grows only minor cereals and other

minor crops; whereas forests under the control of the Forest Department yield a large quantity of large and medium sized timbers and poles, firewood and charcoal. Minor forest produce of Surat district includes bidi leaves of *Asotri*, *Chilar* bark, gums of various types, *Mahuda* flowers and fruits, *Karanj*, fruits and *Kastel* and *Marvel* bamboos.

Of the cultivable wastelands of 1,72,121 acres, a single taluka, namely Dharampur, accounts for as much as 1,39,157 acres. The uncultivated area on account of roads, rivers and buildings etc. is more in the talukas of Dharampur, Olpad, Chorasi and Navsari, than in others.

The gross cropped area of the district in 1953-54 was recorded as 17,48,854 acres, of which 1,04,245 acres of land were cropped more than once; thus 16,62,289 acres were the net cropped area of the district.

The following statement shows the distribution of gross cropped area in Surat district :—

TABLE No. 9

STATEMENT SHOWING DISTRIBUTION OF GROSS CROPPED AREA (IN ACRES) IN SURAT DISTRICT (1953-54)

	Food crops			Non Food crops			All crops		
	Total	Non-Irrigated	Irrigated	Total	Non-Irrigated	Irrigated	Total	Non-Irrigated	Irrigated
Bansda	52,609	52,480	129	22,695	22,686	9	75,304	75,166	138
Bardoli	41,967	40,168	1,799	48,341	48,147	194	90,308	88,315	1,993
Bulsar	42,882	42,232	650	59,443	59,314	129	1,02,325	1,01,546	779
Chikhai	65,149	64,044	1,105	62,553	62,543	10	1,27,702	1,26,587	1,115
Chorashi	45,831	44,023	1,808	48,997	48,522	475	94,828	92,545	2,283
Dharampur ...	87,307	87,150	157	36,618	36,611	7	1,23,925	1,23,761	164
Gandevi	25,910	23,531	2,379	24,259	24,220	39	50,169	47,751	2,418
Kamrej	28,013	23,858	4,155	54,600	52,949	1,651	82,613	76,807	5,806
Mahuwa	36,501	36,000	501	37,584	37,466	118	74,085	73,466	619
Mandvi	62,850	62,362	488	48,538	48,538	—	1,11,388	1,10,900	488
Mangrol	69,239	68,873	366	79,206	79,206	—	1,48,445	1,48,079	366
Navasari	59,337	53,986	5,351	66,338	66,179	159	1,25,675	1,20,165	5,510
Olpad	50,663	50,663	—	61,397	61,397	—	1,12,060	1,12,060	—
Palsana	19,320	17,759	1,561	26,608	26,129	479	45,928	43,888	2,040
Pardi	48,348	45,231	3,117	50,807	50,807	—	99,155	96,038	3,117
Songadh	78,057	78,043	14	33,593	33,593	—	1,11,650	1,11,636	14
Valod	27,007	26,685	322	20,546	20,546	—	47,553	47,231	322
Vyara	77,597	76,875	722	48,144	48,090	54	1,25,741	1,24,965	776
Total	9,18,587	8,93,963	24,624	8,30,267	8,26,943	3,324	17,48,854	17,20,906	27,948

TABLE No. 10

STATEMENT SHOWING THE DISTRIBUTION OF CROPPED AREA IN SURAT DISTRICT 1953-54.

	Cereals	Pulses	Sugars	Fruits	Vegetables	Oil-seeds	Drugs and Narcotics	Spices & Condi-ments	Fibres	Fodder	Others
Bansda	43,720	8,666	50	79	44	1,582	—	9	3,589	17,515	—
Bardoli	28,856	11,406	6	1,246	453	1,976	20	61	26,323	19,961	—
Bulsar	26,620	9,154	325	6,458	325	292	6	129	1,259	57,757	—
Chikhai	48,919	13,143	293	2,329	465	1,744	10	95	6,755	53,949	—
Chorasi	36,023	4,475	91	2,169	3,073	1,647	106	823	21,050	25,121	—
Dharampur ...	66,589	20,281	159	247	31	4,369	—	8	82	32,159	—
Gandevi	16,195	5,081	720	3,057	857	448	12	357	3,711	19,741	—
Kamrej	23,300	3,537	2	678	496	4,396	88	131	30,207	18,042	—
Mahuva	27,643	8,490	159	122	137	6,030	75	42	13,086	18,194	—
Mandvi	51,880	10,516	2	123	379	4,134	66	61	21,371	22,906	—
Mangrol	62,477	6,487	—	—	275	5,015	69	71	50,069	23,982	—
Navsari ...	46,081	10,750	191	1,455	860	2,583	24	292	26,195	37,244	—
Olpad	44,150	5,713	2	132	672	1,978	102	266	44,125	14,539	387
Palsana	13,782	3,697	1	1,555	285	1,856	10	180	13,538	11,024	—
Pardi	31,313	11,813	418	4,623	191	395	—	33	202	50,177	—
Songadh	61,486	16,493	14	1	63	5,762	—	9	9,498	18,324	—
Valod	19,827	6,920	63	96	101	2,871	—	48	9,411	8,216	—
Vyara	59,270	18,010	166	30	121	11,412	—	39	19,564	17,129	
Total ...	7,08,131	1,74,632	2,662	24,400	8,828	58,490	588	2,654	30,0,029	4,65,980	387

As is evident from the tables given above, the district grows in abundance both food and non-food crops. Out of the gross cropped area of 17,20,905 acres, 9,18,587 acres i. e., 53.37 per cent of the total is under food crops and the remaining 8,30,267 acres i. e. 46.63 per cent of the total under non-food crops.

The main food crops of the district are rice, jowar, ragi and *kodra* among cereals; *val*, *tuver* and *udad* among pulses; fruits and vegetables; sugarcane and chillies among condiments and spices. The six talukas viz. Dharampur, Songadh, Vyara, Mangrol, Chikhali and Mandvi have, together, 4,40,199 acres under food crops, i. e. 62.1 per cent of the total area under food crops. Dharampur taluka alone has 87,307 acres under food crops the highest in any one taluka in the district.

The chief non-food crop is cotton which alone accounts for 2,95,562 acres of land out of 8,30,267 acres under non-food crops. In fact, cotton dominates the rural eeconomy of the district. The other non-food crops are groundnuts and casrtor-seeds among oilseeds; tobacco; and grass as fodder. Almost all the talukas grow non-food crops extensively but larger acreages are to be found in Mangrol, Navsari, Chikhali. Olpad, Bulsar, Kamrej and Pardi Talukas. Mangrol alone accounts for the highest (79,206) acreage in the district.

The following table shows the comparative areas under different crops in Surat district at the time of the compilation of the old Gazetteer and at present :—

TABLE No. 11

COMPARATIVE STATEMENT SHOWING AREA IN ACRES UNDER VARIOUS CROPS IN SURAT DISTRICT FOR THE YEAR 1880-81 AND 1953-54

Crops	1880-81	1953-54
Cereals—		
Jowar	85,527	3,00,039
Bajri	6,329	6,714
Wheat	27,237	16,547
Rice	93,952	2,66,160
Kodra	46,076	56,086
Ragi	12,275	34,849
Others	1,885	27,736
Total : Cereals	2,72,281	7,08,131
Pulses—		
Tur	28,519	53,177
Gram	1,564	—
Val	—	66,723
Adad	—	34,313
Others	59,239	1,41,808
Total : Pulses	89,322	2,96,021

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Crops	1880-81	1953-54
Oilseeds—		
Castor	—	10,114
Sesamum	1,372	2,582
Groundnut	—	40,298
Others	43,764	5,496
Total : Oilseeds ..	45,136	58,490
Fibres—		
Cotton	69,089	2,95,562
Hemp	—	847
Jute	—	3,620
Others	3,066	—
Total : Fibres ..	72,155	3,00,029
Sugars—		
Sugarcane	5,144	2,522
Others	—	140
Total Sugars ..	5,144	2,662
Drugs and Narcotics—		
Tobacco	419	553
Others	—	35
Total Drugs and Narcotics ..	419	588
Condiments and Spices ..	961	2,654
Vegetables and Fruits ..	1,934	33,228
Fodder	NA	4,65,980
Dyes	281	—

The above statement shows that there has been considerable increase in the cropped area of the district . It also shows that during the past 78 years some new crops have entered in the agricultural economy and some existing crops have assumed new importance.

AGRICULTURAL HOLDINGS.

No study of land utilisation would be complete unless the problem of land holdings is considered. The size of owned holdings is one of the most important factors governing agricultural cultivation. The following statement shows the Quinquennial Statement of Holdings in Surat district :—

TABLE No. 12

QUINQUENNIAL STATEMENT OF HOLDINGS IN RAYATWARI ARFA IN SURAT DISTRICT (1952-53).

Acre groups	Class "A"			Class "B"			Class "C"			All Class		
	No. of Holders	Area held in acres		No. of Holders	Area held in acres		No. of Holders	Area held in acres		No. of Holders	Area held in acres	
		Khalsa	Inam		Khalsa	Inam		Khalsa	Inam		Khalsa	Inam
1	2	3	4	5	6	7	8	9	10	11	12	13
(1) Upto 5 acres ...	1,23,819	2,18,888	16,612	4,981	16,684	3,593	16.186	46.809	12,932	1,44,986	2,82,381	
(2) Over 5 acres and upto 15 acres ..	39,764	2,70,084	22,944	3,195	28,291	5,651	9,511	72,160	11,655	52,470	3,70,535	33,137 40,250
(3) Over 15acres and upto 25 acres...	10,838	1,80,895	11,152	1,788	28,161	5,818	3,682	63,094	8,418	16.308	2,72,150	25,388
(4) Over 25 acres and upto 100 acres.	5,891	1,95,704	8,459	1,441	51,065	8,477	2,986	1,40,832	12,355	10,318	3,87,601	29,291
(5) over 100 acres and upto 500 acres.	460	96,845	545	130	18,611	2,086	280	56,548	4,483	870	1,72,004	7,114
(6) Over 500 acres ...	19	16,225	76	1	579	—	6	3,389	—	26	20,193	76
Total-All groups ...	1,80,791	9,78,641	59,788	11,536	1,43,391	25,625	32,651	3,82,832	49,843	2,24,978	15,04,864	1,35,256

Class "A"—Those persons who cultivate lands with or without the help of hired labour.
Class "B"—Those persons who do not cultivate land themselves, but supervise and direct cultivation by labourers or farm servants.
Class "C"—Those who receive rent but do not directly or indirectly take part in cultivation.

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In 1952-53, 16,40,120 acres of *Khalsa* and *inam* lands together were held by 2,24,978 persons in various size groups. These holders were divided into three classes and these were 1 80,791 owner cultivators who held 10,38,429 acres of land; 11,536 persons holding 1,69,016 acres of land cultivated under their guidance and supervision; and 32,651 persons holding 4,32,675 acres, rented out their lands to tenants, Therefore, the first two categories of holders can be styled as agriculturists, and the third category as non-agriculturists The persons in the last category constituted 14.5 per cent of the total nember of persons holding land and held 26.4 per cent of the total area of holdings.

The above statement reveals that a large majority of holdings in the district were in the acre group "less than 5 acres." The holders in this category were 1,44,986 i.e. 64.4 per cent of the total number of holders, accounting for only 3,15,518 acres i. e. 19.2 per cent of the total area under holdings. The next most numerous category was the class of holders owning between 5 and 15 acres. Their number was 52,470 i. e. 23.3 per cent of the total number of holders, accounting for 4,10,785 acres i. e. 25.04 per cent of the total area held. Large holdings such as those above 500 acres were very few-only 26 in number and the area coverd by them came to 20,269 acres only.

It is, however, not possible to show whether there has been any increase or decrease in the number of holdings on the whole or even in various acre groups, on account of absence of a detailed statement of holdings in the old Gazetteer.

The following is the quinquennial statement of holdings in Surat district (taluka-wise) for the year 1952-53 :

TABLE No. 13.

QUINQUENNIAL STATEMENT OF HOLDINGS IN SURAT DISTRICT (TALUKAWISE) FOR THE YEAR 1952-53.

Acre Groups.	Bansda			Bardoli			Bulsar		
	No. of Holders	Area Held (acres)		No. of Holders	Area Held (Acres)		No. of Holders	Area Held (Acres	
		Khalsa	Inam		Khalsa	Inam		Khalsa	Inam
Upto 5 acres	3,723	10,534	127	5,160	11,272	1,463	16,254	22,346	735
Over 5 and upto 15 acres	2,883	24,417	642	2,385	17,782	1,352	3,329	26,104	675
Over 15 and upto 25 acres	669	11,234	825	1,030	18,712	744	696	13,947	366
Over 25 and upto 100 acres	330	12,427	520	587	28,680	839	330	22,658	630
Over 100 and upto 500 acres	16	4,546	625	4	1,240	—	30	8,599	4
Over 500 acres	—	—	—	—	—	—	—	—	—
Total All Groups	7,621	63,158	2,739	9,166	77,686	4,398	20,639	93,654	2,410

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Acre Groups	Chikhali			Chorasi			Dharampur		
	No. of Holders	Area Held (Acres)		No. of Holders	Area Held (Acres)		No. of Holders	Area Held Acres	
		Khalsa	Inam		Khalsa	Inam		Khalsa	Inam
Upto 5 acres	13,159	24,448	1,309	7,811	19,401	4,174	3,791	9,425	1,696
Over 5 and upto 15 acres	4,120	20,321	1,059	3,537	24,018	5,543	3,515	29,447	3,551
Over 15 and upto 25 acres	1,132	22,297	362	938	9,714	4,096	1,177	18,477	3,774
Over 25 and upto 100 acres	974	38,138	259	366	9,304	3,910	694	21,511	6,502
Over 100 and upto 500 acres	55	17,414	253	4	514	—	30	3,040	3,316
Over 500 acres	—	—	—	—	—	—	—	—	—
Total All Groups	19,440	1,22,618	3,242	12,656	62,951	17,723	9,207	81,870	18,839

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TABLE No. 13 (contd)

Acre Groups	Gandevi			Kamrej			Mahuva		
	No. of Holders	Area Held (Acres)		No. of Holders	Area Held (Acres)		No. of Holders	Area Held (Acres)	
		Khalsa	Inam		Khalsa	Inam		Khalsa	Inam
Upto 5 acres	10,260	19,120	1,755	3,485	7,547	4,348	3,907	9,990	594
Over 5 and upto 15 acres...	2,592	12,237	1,471	2,309	16,387	1,706	2,002	18,057	797
Over 15 and upto 25 acres	474	4,019	430	810	13,857	1,409	643	11,253	765
Over 25 and upto 100 acres	136	5,213	209	707	29,856	3,612	476	20,369	1,916
Over 100 and upto 500 acres	4	330	104	18	4,902	64	25	5,698	286
Over 500 acres ...	—	—	—	—	—	—	—	—	—
Total All Groups	13,466	41,019	3,969	7,329	72,549	11,139	7,053	65,372	4,358

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Acre Grops	Mandvi			Mangrol			Navsari		
	No. of Holders	Area Held (Acre)		No. of Holders	Area Held (Acres)		No. of Holders	Area Held (Acres)	
		Khalsa	Inam		Khalsa	Inam		Khalsa	Inam
Upto 5 acres	5,749	14,745	1.463	3,805	32,326	4,247	34,599	42,070	4,397
Over 5 and upto 15 acres... .	4,249	34,807	2,470	3,057	31,876	3,683	5,437	25,603	3,830
Over 15 and upto 25 acres	1,123	19,561	1.566	1,909	29,320	2,184	1,391	22,988	22,953
Over 25 and upto 100 acres .	705	26,646	891	928	30,532	2,445	367	13,404	1,006
Over 100 and upto 500 acres	18	2,230	9	69	5,883	178	30	2,278	2,768
Over 500 acres	—	—	—	3	1,419	—	—	—	—
Total All Groups	11,844	97,989	6.399	9,771	1,31,356	12,737	41,824	1,06,343	12,954

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TABLE No. 13 (contd)

Acre Groups	Olpad			Palsana			Pardi		
	No. od Holders	Area Held (Acres)		No. of Holders	Area Held (Acres)		No. of Holders	Area Held (Acres)	
		Khalsa	Inam		Khalsa	Inam		Khalsa	Inam
Upto 5 acres	12,030	16,602	4,572	2,210	5,018	813	8,329	16,657	757
Over 5 and upto 15 acres...	3,979	25,357	8,859	1,457	12,088	1,389	2,425	11,490	1,068
Over 15 and npto 25 acres	1,332	19,642	4,676	370	7,901	677	780	14,301	582
Over 25 and upto 100 acres ...	887	21,734	5,401	321	10,722	1,238	1,013	30,286	486
Over 100 and upto 500 acres	34	3,835	1,634	5	213	679	79	14,856	—
Over 500 acres	—	—	—	—	—	—	2	1,151	—
Total All Groups ..	18,262	87,170	25,142	4,373	35,132	4,796	12,622	88,741	2,893

Acre Groups	Songadh			Valod			Vyara		
	No. of Holders	Area Held (Acres)		No. of Holders	Area Held (Acres)		No. of Holders	Area Held (Acres)	
		Khalsa	Inam		Khalsa	Inam		Khalsa	Inam
Upto 5 acres	3,128	9,141	79	3,213	7,172	453	4,373	4,567	155
Over 5 and upto 15 acres...	2,835	25,781	134	1,342	11,221	685	1,007	8,285	1,336
Over 15 and upto 25 acres	1,137	21,385	222	357	6,692	275	340	6,685	1,482
Over 25 and upto 100 acres ...	897	39,343	500	306	13,869	235	324	11,818	692
Over 100 and upto 500 acres	101	17,387	—	24	3,721	13	340	75,318	—
Over 500 acres	2	1,398	—	—	—	—	19	16,225	76
Total All Groups ...	8,100	1,14,526	935	5,424	42,675	1,661	6,403	1,22,898	3,741

AGRICULTURAL HOLDINGS

The size of holding in this district varies from taluka to taluka according to the conditions of the monsoon, soil, crop pattern, financial condition of the *rayats* and also the extent of absentee landlordism prevailing in the talukas. It is smaller in the talukas lying on the coastline than those in the central and eastern belts. On the whole, the greater portion of the land is held by persons having holdings less than 15 acres. Holdings in most of the talukas are small and they are so divided among members of the family and, in some cases so scattered in fragments over the village and taluka and even different talukas, and, in rare cases also over adjoining districts, that the size of holding does not give an accurate guide to the average size of the unit of cultivation. In the talukas of Navsari, Bulsar, Chikhali, Olpad, Gandevi and Pardi, holdings below five acres are larger in number than in other talukas.

According to the quinquennial statement of holdings for Surat District (1952-53), the average holding per holder for the district as a whole works out at 7.29 acres. A sample survey of the holdings in Gujarat districts, conducted by the Bureau of Economics and Statistics, Bombay State, in the year 1947-48, shows that average holding in the district was one of the lowest in Gujarat. The average number of fragments per holder was estimated at three, each fragment being or 1.78 acres on an average.

In 1947, the Government of Bombay enacted a law called the Bombay Prevention of Fragmentation and Consolidation of Holdings Act, with a view to starting the process of consolidation of holdings.

The first part of the law deals with prevention of further fragmentation of land. Government has been empowered to fix the "standard area" (i. e., the minimum area necessary for profitable cultivation as a separate plot) for any class of land in any local area. The "standard area" is such as is expected to keep the cultivator fully employed on the field and the yield from it is expected to be sufficient to cover the cost of cultivation and Government revenue assessment and yield a reasonable profit. On account of difference in quality of soil, climate, standard of husbandry and other factors, the standard areas for different types of land vary from district to district. The range of acrage of the standard areas applicable to various types of land is as follows :

Dry crop, from one to four acres; Rice, from one guntha to one acre; Garden, from five gunthas to one acre; and *Varkas* from two acres to six acres.

Under the law, the standard areas are fixed by the Collector in consultation with the District Advisory Committee and after consideration of any objection from the public to his provisional figures which have to be published for general information

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inviting objections. All existing holdings which are smaller than the standard area are declared as fragments and entered in the record of rights as such and the fact notified to the fragment holders. The fragment holder and his heir can cultivate and inherit the fragment, but if at any time he or his heir wants to sell or lease the fragment, it must be sold or leased to a contiguous holder who can merge it with his field. In case the contiguous holder is unwilling to take it or purposely makes a low bid, Government purchases the fragment in question at the market value according to the provisions of the Land Acquisition Act, 1894, and leases it out to any of the neighbouring holders,. In this process tenants of the fragments are protected; they are not to be discontinued. Creation of fragments in future is prohited. It cannot be done either by transfer or partition. Transfer or partition contrary to the provisions of the Act is void and persons guilty of the breach of the law are liable to pay a fine of and up to Rs. 250.

Side by side the Act also provides for the consolidation of holdings into compact blocks. This involves valuation of all holdings in a village and then their redistribution in such a manner as to secure to each cultivator the same return from land which he had got before consolidation. Every effort is made to ensure that exchange is made only of land of equal fertility and outturn. Where such exchange is not possible, compensation is paid to the owner who is allotted a holding of less market value than his original holding and this compensation is recovered from the owner who is allotted the holding which has greater value than his original holding. The amount of compensation is fixed according to the provisions of the Land Acquisition Act. After the process of consolidation is over, the tenure of the original holding is transferred to the new consolidated holding. Similarly leases, debts and encumbrances, if any, are also transferred, adjusted and fixed up. The interests of tenants are safeguarded, as far as possible, and tenancies are usally transferred to the exchanged land. If there is any difference in value between the original holdings and the exchanged ones, adjustments in rents are made.

The first part of the Act has been brought into force in the pre-merger territories of the district. Government has determined the standard areas for different kind of land in the district. Standard areas fixed are two acres for dry crop and and 20 gunthas for rice and *bagayat* lands. Pieces of lands below these standards have been declared as fragments, entered as such in the Record of Rights and notices have been served to those fragment holders.

The second part of the Act which relates to the consolidation of holdings has been applied to the talukas of Mandvi and Olpad. The preliminary notification under section 15 of the Act were issued in respect of 112 villages of the Mandvi taluka and 5o villages of the Olpad taluka.

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Out of 112 villages of Mandvi taluka, work of consolidation has been completed in respect of 62 villages, and actual execution of schemes, i. e. handing over possession of exchanged holdings, has been effectecd in 36 villages only. The consolidation work in the remaining 50 villages of Mandvi taluka has been postponed on account of construction of irrigation canals and scarcity roads undertaken by Government. In Olpad taluka, consolidation work is completed in nine villages and the scheme has been actually executed in two villages.

The following statement shows the progress of consolidation work in Surat district:—

TABLE NO. 14.

PROGRESS OF CONSOLIDATION OF HOLDINGS IN SURAT DISTRICT BEFORE 31ST MAY 1954.

	Mandvi Taluka	Olpad Taluka
(1) No. of villages notified under section 15 of the Act	112	50
(2) (i) No. of villages in respect of which the consolidation scheme is published...	62	9
(ii) Area available for consolidation in acres and gunthas	49,029-35	4,337-23
(iii) Number of Holdings before consolidation	14,283	1,619
(iv) Number of Holdings (after consolidation)	7,929	1,619 1,062
(v) Number of khatedars (holders) ...	5,438	657
(3) (i) No. of villages where the schemes have been executed	36	2
(ii) Area available for consolidation in acres and gunthas	22,306-20	377-30
(iii) Number of Holidings (before consolidation)	5,631	124
(iv) Number of Holdings (after consolidation)	3,347	76
(v) Number of khatedars	2,641	66
(vi) Average size of Holdings before consolidation in acres and gunthas ...	3-38	3-1
(vii) Average size of Holdings after consolidation in acres and gunthas ...	6-26	4-38

From the above statement it is clear that consolidation work has done some good. The average holding has increased in size and agricultural cultivation is bound to improve if the holdings are consolidated throughout the district.

CROP PRODUCTION
Cereals.

Surat district grows cereals on 7,08,131 acres of land i. e. 40.49 per cent of the total cropped area of the district. The important ones among cereals grown are *juwar* (jowar), *bhat* (rice), *bavto* (ragi), kodra, *ghau* (wheat) and *bajri*. The following table shows the area in acres under various cereals grown in the district:–

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TABLE No. 15

STATEMENT SHOWING AREA IN ACRES UNDER CEREALS IN EACH TALUKA OF SURAT DISTRICT 1953-54

	Rice.	Wheat.	Jowar (Kharif)	Jowar (Rabi).	Bajri.	Maize	Ragi (Nagli).	Italian Millets	Kodra.	Varai.	Sava (Kang)	Banti	Bhadli	Other Cereals	Total Cereals.
Bansda	22,858	41	7,140	—	—	—	9,909	—	2,337	641	51	743	—	—	43,720
Bardoli	12,265	1,299	14,293	786	4	—	—	—	60	—	—	10	—	139	28,856
Bulsar	21,100	24	8,487	—	—	—	1,248	—	1,671	—	—	—	—	—	26,620
Chikhali	28,706	330	14,183	—	—	—	2,999	—	2,565	33	—	103	—	—	4,8919
Chorasi	2,115	951	28,471	965	3,494	27	—	—	—	—	—	—	—	—	36,023
Dharampur ...	28,092	5	262	—	3	—	29,599	—	3,303	5,101	—	—	1	2,223	66,589
Gandevi	10,442	346	5,339	—	5	—	48	—	15	—	—	—	—	—	16,195
Kamrej	4,599	905	16,642	1,134	18	2	—	—	—	—	—	—	—	—	23,3 00
Mahuva	10,085	340	16,430	2	15	—	432	3	286	—	6	44	—	—	27,643
Mandvi	14,074	919	22,962	8,335	50	103	1,508	—	2,957	—	—	619	127	226	51,880
Mangrol	10,737	2,062	21,563	20,109	102	112	—	—	4,503	—	—	1,829	—	1,460	62,477
Navsari	15,272	801	29,909	—	82	2	8	—	7	—	—	—	—	—	46,081
Olpad	3,499	6,553	24,355	6,825	2,913	5	—	—	—	—	—	—	—	—	44,150
Palsana	2,933	355	10,466	—	28	—	—	—	—	—	—	—	—	—	13,782
Pardi	26,432	93	96	—	—	—	1,799	—	2,893	—	—	—	—	—	31,313
Songadh	19,459	861	9,832	4,224	—	428	8,536	—	10,981	52	1,034	4,779	1,151	1,149	61,486
Valod	s8,589	249	10,499	47	—	—	—	—	169	—	7	50	217	—	19,827
Vyara	24,903	413	19,792	2,891	—	1	—	—	3,012	—	329	1,042	—	6,887	59,270
Total ...	2,66,160	16,547	2,54,721	45,318	6,714	680	56,086	3	34,849	5,827	1,427	9,219	1,496	9,084	7,08,131

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Bajri.

Bajri (spiked millet) is grown on 6,714 acres of land in the district. Its cultivation is chiefly concentrated in the talukas of Chorasi and Olpad which account for nearly 6,400 acres. In rest of the talukas, the acreage under *bajri* is almost . negligible. Bajri is usually sown in the month of July and is harvested in October. Fields intended for bajri cultivation are harrowed twice or thrice and manured at the rate of 5-10 cart loads of farm yard manure per acre before the crop is sown. It is grown as an entire crop. The crop is twice weeded and inter-cultured. It is seldom watered. The variety grown in this district is the local non-descript one and no improved variety has been found suitable for this tract. Bajri fields are rotated with vegetables or cotton. The average yield of bajri per acre comes to 600 lbs., and that of fodder to 1,800 lbs. Thtotal outturn of bajri in Surat district in 1 943-54 was estimated 802 tons. Bajri is chiefly used as a bread grain and the stalks are given to cattle as fodder.

Bavto or Nagli.

Bavto or Nagli:—(Ragi) is the third largest cereal crop of the district. It rovers an area of 56,086 acres i. e. 7.92 per cent of the total area under cereals. It is grown chiefly in Dhârampur, Songadh, Bansda, Chikhali, Bulsar, Pardi and Mandvi talukas. Dharampur taluka alone accounts for 29,599 acres of land under this crop. *Nagli* is entirely a rain-fed crop and is generally sown in the lighter types of soils. Seedlings are raised in special seed beds after the first showers of the monsoon and in about three weeks time they are ready for being transplanted. Lands intended for *nagli* cultivation are plaughed in the summerand are harrowed twice or thrice, before the seedlings are transplanted by the end of July. The crop is not generally watered and manured, and is harvested in the month of October. The yield per acre of this crop comes to about 1,200 lbs. and the total out-turn for the year 1953-54 was estimated at 18,900 tons. *Nagli* is rotated with either early coarse paddy or pluses like *Adad* and *choli*. The grain is used for preparing bread particularly by the poorer sections of the population.

Bhat or Dangar

Bhat or Dangar:- (Rice) is one of the chief crops of Surat District, yielding place of importance among cereals only to jowar. This crop covers an area of 2,66,160 acres i. e. 15 per cent of the total cropped area of the district and 37.58 per cent of the total area under cereal crops. Rice is grown extensively in all the eighteen talukas and mahals of the district but larger areas are found in Chikhali, Dharampur, Pardi, Vyara, Bansda, and Bulsar, each having more than 20,000 acres under the crop. It is largely an unirrigated crop, only 10,069 acres being under irrigation. Out of the total of 2,66,160 acres under this crop, about two lakh acres are in the *Kyari* lands.

There are three chief categories of rice varieties grown in the district and they are as follows :—

(1) *Early varieties* :- those which mature in about 110-115

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days time; namely, *kada, kavachi, dhundhani, saliu, dangi, sathi, panisal, malwan, tonnvel* etc.

(ii) *Mid-late varieties* : those which mature in about 120-125 days time; namely, *Wankvel, Z-31, Sukhvel, T-21, Manjarvel Bengali* etc.

(iii) *Late varieties* :- those which mature in about 140-150 days time, namely, *Nawabi Kolum, Khusbi, Delhi, Basmati* etc.

About 75 per cent of the total area under rice in Surat district is under early varieties, about 10 per cent under mid-late types and the remaining under the late ones. The grain of early types is coarse, hence fetches comparatively lesser value than those of the mid-late and the late varieties which are small, thin and somewhat translucent. The *Basmati* and *Bengali* varieties command higher values on account of their flavour.

In the lighter and undulated soils of Songadh, Mangrol Bansda, Dharampur and Vyara, the abovementioned early types are drilled, and the mid-late and the late ones and sometimes the early ones are transplanted. The general method, however, of sowing paddy over the whole of the district is the one of transplanting. In early June, seedlings are raised in a seed-bed, specially cleaned, pulverised and manured with 5 cart loads of farm yard manure per acre, the seed rate being about 40 lbs. per acre. The seed beds are watered in the event of inadequate rainfall. Generally, seedlings are ready for transplanting in about three weeks. Transplanting is usually done by hand and at each place six to eight seedlings are planted. Before transplanting, the *kyari* lands intended for paddy cultivation are puddled with a local wooden plough and at the same time 5 to 8 cart-loads of farm yard manure are applied to every acre of the land. Some of the well-to-do cultivators give a top dressing of about 20 lbs. of Nitrogen in the form of ammonium sulphate per acre when the crop is about 40 days old and when it is raining. The crop is harvested between 10th of October and 10th of November. The early types are harvested in October and the late ones are reaped in November. The estimated cost of cultivation per acre of paddy is Rs. 150. The yield of paddy per acre comes to about 1,800-2,400 lbs. In the year 1953-54, the total outturn of rice in Surat district was estimated at 1,18,389 tons. Most of the paddy lands are not irrigated. Irrigation is resorted to whenever the rainfall is deficient or whenever late varieties are grown. In 1953-54, only 10,069 acres of paddy were under irrigation in Surat District. Paddy is grown generally as a single crop and it is not sown mixed with any other crop.

The Department of Agriculture recommends two improved varieties of paddy namely Z-31 and K-176-12. The Z-31 varieties is a mid-late type which matures in 125 to 130 days and gives 10 to 15 per cent higher yield than the local one. The grain

of this varieties is fine and lustrous. The K-176-12 varieties matures within 105 days and it give 10-15 per cent higher yield than the local *Kada* variety. It is a bold grain type with white colour.

Since 1953, the Department of Agriculture has been advising the paddy cultivators of Surat district to follow what is called the Japanese method of paddy cultivation. This method has been designed on the Japanese model with suitable variations to suit Indian conditions. The main features of the Japanese method of paddy cultivation are the preparation of raised seed beds, sowing of seeds in lines, transplanting seedlings in rows, careful and clean cultivation, heavy manuring with manures and fertilisers, interculturing, assured water supply and utilisation of waste by turning it into compost.

According to this method, the seedlings are raised on specially raised seed beds and the seed bed is given a fairly thin layer of compost and ash without burning any cowdung or any such organic matter. The seed rate is about 10-15 lbs., quite sufficient to transplant an acre of paddy field. The seedlings thus grown on raised seed beds have been observed to be very vigorous and healthy and compare very favourably with those raised on rabbed seed bed. Under this method, lesser number of seedlings are planted on each hill which results in freer growth of plants and gives out better tillers; hence it reduces the seed rate per acre of paddy field.

Seedlings are transplanted in straight rows with a view to facilitating interculturing, weeding and easy movement of farmers. Interculturing is an important operation in the Japanese method. It checks the extra growth of plants, encourages tillering and helps to develope a good root system, thus preventing lodging to some extent. Interculturing can be done by hand or by suitable handhoes. Lastly, small, but repeated doses of fertilisers are advocated under the Japanese method.

The Japanese method is an improved and intensive method of paddy cultivation and can be followed by small individual cultivators. It shows the way for obtaining higher yields from a small area. The Department of Agriculture has conducted demonstration trials (105 in the year 1953 and 300 in 1954) and have found that it is certainly advantageous to grow paddy by the Japanese method.

The following statement shows the cost of cultivation, income per acre and profits earned by following the local method and the Japanese method:—

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Items	Under the Japanese method	Under the local method
(1) Yield of grain per acre (lbs.) ...	3,204	1,863
(2) Yield of fodder per acre (lbs.) ...	3,429	2,429
(3) Value of grain (Rs.)	521- 9-0	296- 4-5
(4) Value of fodder (Rs.)	64- 9-7	45- 2-7
(5) Total gross income per acre (Rs.)	586- 2-7	341- 7-0
(6) Total expenses per acre (Rs.) ...	293-11-6	186-13-2
(7) Profit per acre (Rs.)	292- 7-1	154-9-10

The entire paddy area in Surat district might follow the Japanese method in the near future.

Ghau.

Ghau:—(Wheat) is another cereal crop of this district, though as compared to jowar and rice, it is not so important. It covers an area of 16,547 acres of land of which large proportions are found in the talukas of Olpad, Mangrol and Bardoli. Wheat is also grown on a significant scale in Chorashi, Kamrej, Navsari and Songadh talukas. In other areas, it is grown on a smaller scale.

It is usually sown in October-November and is harvested in February. Generally five cart-loads of farm yard manure are applied per acre in lands in which wheat is to be grown as an irrigated crop. The fields are twice harrowed before wheat is sown. Occasional irrigation is also given. The yield of irrigated wheat is about 800 lbs. per acre while that of unirrigated wheat is 560 lbs. per acre. The total outturn of wheat in Surat District in 1953-54 has been estimated at 2,072 tons. About 3,000 acres under wheat are irrigated, the rest being unirrigated. Local non-descript types of wheat are grown in the unirrigated areas while for the irrigated areas the Department of Agriculture has introduced *Kenphad* variety of wheat. Before the introduction of *Kenphad*, *Pusa-4* wheat was grown as irrigated wheat. The former is a rust-resistant while the latter escapes rust because of its early maturity. Wheat is generally used as breadgrain and its flour is used in preparing bread, *chapatis* and *puris*.

Jowar.

Juwar or *Jowar*, the Indian millet, is one of the most important crops of the district, accounting for 17.15 per cent of the cropped area. It is the single largest cereal crop of the district and is grown on 3,00,039 acres i.e. 42.37 per cent of the acreage under cereals. *Jowar* is grown both as a *Kharif* as well as a *Rabi* crop, but it is mainly a *Kharif* crop.

The *Kharif* Jowar covers an area of 2,54,721 acres, the areas of concentrated cultivation being the talukas of Navsari, Chorashi, Olpad, Mandvi and Mangrol each having more than

20,000 acres under *Kharif* jowar. It is also grown in fairly large areas in Vyara, Kamrej, Mahuwa, Bardoli and Chikhali. The lands intended for *Kharif* jowar are harrowed twice or thrice in May-June before the commencement of monsoon. Jowar is sown in the month of August and is ready for harvesting in January. At the time of preparatory tillage, farm yard manure is applied to the fields at the rate of 5-10 cartloads per acre. The crop is weeded once or twice and intercultured two to three times with a hoe.

The *rabi* jowar covers an acreage of 45,318 only and is mainly grown in Mangrol, Mandvi, Olpad and Songadh talukas. It is sown in September-October and harvested in February.

Jowar grown in this district in either season belongs to local varieties *perio* for the *kharif* season and non-descript local one for the *rabi* season. The Department of Agriculture has recommended B. P. 53 variety for the *kharif* season. The grain is big, white and lustrous but matures a couple of weeks later than the *perio*. Hence, in the years of scarcity, late or in adequate rains, it fares badly as compared to *perio*. But with the flowing of Kakarapar waters, this variety is bound to develop. The Department has not recommended any improved variety for *rabi* season.

The yield per acre of *kharif* jowar comes to about 760 lbs. and that of *rabi* jowar about 600 lbs. The yield of fodder is nearly three times the grain yield. The district produced in 1953-54, 53,137 tons of *kharif* jowar and 802 tons of *rabi* jowar. The usual rotation followed in respect of jowar is cotton-jowar in black cotton soils and in the lighter soils of Songad, Vyara, Mangrol and Kamrej the normal rotation is of three years namely groundnut-cotton-jowar-groundnut and so on.

Jowar is chiefly used as a bread grain and its straw is used as fodder for cattle.

Kodra.

Kodra is another cereal crop of the district and covers an area of 34,849 acres. It is chiefly grown in Songadh, Mangrol, Dharampur, Vyara, Mandvi, Pardi, Bansda and Chikhali talukas. It is sown usually in the beginning of July after the commencement of monsoon and is harvested by the end of September. Generally no manures are applied to lands intended for the cultivation of *kodra*. The lands are ploughed once and harrowed once before sowing. The yield per acre of *kodra* comes to about 1,100 lbs. and the total outturn for the year 1953-54 was estimated at 5,005 tons. Kodra is consumed mainly by poorer sections of people in place of rice.

In addition, Surat district grows a number of other cereals which are grown on smaller areas and are minor in importance. They are *banti* (9,219 acres), *bhadli* (1,496 acres), *Kang* (Italian

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PULSES.

millets) (3 acres), *makai* or maize (680 acres), *sava* (1,427 acres) and *varai* (5,827 acres).

Pulses cover an area of 1,74,632 acres in Surat district i.e. 9.98 per cent of the total cropped area of the district. The important ones among the pulses grown are *val* (large fruited dolichos), *tuver* (pigeon pea), *adad* (black gram), *chana* (gram), *mag* (green gram), *choli* (small fruited dolichos), and *vatana* (peas). The following statement shows area in acre under various pulses:—

TABLE No. 16.

STATEMENT SHOWING AREA IN ACRES UNDER PULSE IN SURAT DISTRICT TALUKA-WISE 1953-54

	Gram.	Mug.	Tur.	Adad.	Masur.	Math.	Val.	Choli.	Vatana.	Lang.	Other Pulses.	Total Pulses
Bansda ...	227	509	8,252	2,971	—	—	1,348	303	30	21	5	8,666
Bardoli ...	82	221	2,455	1,317	—	23	7,102	165	35	6	—	11,406
Bulsar ...	196	47	340	580	—	—	7,785	5	89	112	—	9,154
Chikhali ...	764	270	1,649	1,045	—	—	8,788	177	236	274	—	13,143
Chorasi ...	62	476	2,815	57	—	38	803	224	—	—	—	4,475
Dharampur ...	200	42	8,382	10,149	—	—	910	90	11	21	476	20,281
Gandevi ...	125	100	465	110	—	—	4,184	46	6	—	45	5,081
Kamrej ...	35	388	1,503	301	—	38	1,176	81	15	—	—	3,537
Mahuva ...	126	442	1,682	2,253	—	10	3,574	356	21	—	26	8,490
Mandvi ...	685	318	3,429	1,454	9	44	3,785	333	445	14	—	10,516
Mangrol ...	673	299	4,198	369	—	—	780	150	—	—	18	6,487
Navsari ...	191	591	2,004	1,003	—	3	6,699	243	16	—	—	10,750
Olpad ...	738	577	3,275	62	—	154	520	187	52	77	71	5,713
Palsana ...	34	145	1,752	502	—	5	1,221	38	—	—	—	3,697
Pardi ...	369	54	666	1,029	—	—	9,550	16	17	112	—	11,813
Songadh ...	1,677	140	7,789	4,465	265	15	1,627	182	327	—	6	16,493
Valod ...	127	246	1,210	1,907	—	44	2,969	238	176	3	—	6,920
Vyara ...	703	809	6,311	4,739	—	123	3,902	681	742	—	—	18,010
Total ...	7,014	5,674	53,177	34,313	274	497	66,723	3,455	2,218	640	647	1,74,632

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Adad.

Adad:-(black gram) is grown on 34,313 acres, mainly in Dharampur, Vyara, Songadh, Bansda and Mahuwa talukas. Area in other talukas under *adad* is relatively small. It is sown in July and harvested in October-November. The yield per acre of this crop comes to about 500 lbs. and the total outturn for 1953-54 was estimated at 5,320 tons. The ripe grains are used as split pulse, boiled as *dal* and eaten usually with wheat or jowar bread. *Papads* (savoury wafers) are made of *adad* pulse.

Chana.

Chana:—(gram) covers an area of 7,014 acres. Though it is sown in all talukas, larger area under this crop are found in Songadh, Chikhali, Olpad, Vyara, Mandvi and Mangrol. Gram is a *rabi* crop and is generally grown after paddy is harvested. It is sown in November and harvested in January-February. The Department of Agriculture has not introduced any improved variety of gram in place of the local non-descript ones. The yield per acre of gram comes to about 500 lbs. and the total outturn of gram in the district for 1953-54 was estimated 740 tons.

Mag.

Mag:—(green gram) covers an area of 5,674 acres. The areas of concentrated cultivation of this crop are in Vyara, Navsari, Olpad, and Bansda, though it is grown in other talukas also on a relatively smaller scale. It, being a *kharif* crop, is sown in July and harvested by the end of September. No improved variety of *mag* has been introduced in the district by the Department of Agriculture. But some improved strains were under experimentation. In 1953-54 the district produced 627 tons of *mag*.

Tuver.

Tuver:-(pigeon pea) stands next to *val* among the pulses grown in the district. It covers an area of 53,177 acres, the acreage of concentrated cultivation being Dharampur, Songadh, Vyara and Mangrol. Mandvi, Olpad, Bansda, Bardoli, Chorashi and Navsari are the other areas where *tuver* is grown on a significant scale.

Tuver is a *kharif* crop and is generally sown in July and harvested in January-February. It is seldom irrigated because, as its roots penetrate deep into the soil, it gets the moisture from the soil. It is sown either alone as a single crop or with jowar as a mixed crop. The yield per acre comes to 680 lbs. and the total outturn for 1953-54 was estimated at 7,598 tons. Varieties of *tuver* grown in this district belong to the local non-descript ones. The Department of Agriculture has not introduced any improved variety in the district.

The green pods of *tuver* are eaten as vegetable. The ripe pulse is split and eaten boiled in various ways. The split pulse is taken as *dal* and is also taken mixed with vegetables. The outer husk of seed with part of the kernel, is sold under the name *thulu* and is a favourite food for milch cattle. The leaves and shells of the pods are a valuable nutritious addition to fodder.

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Val.

Val (large fruited dolichos) is the largest grown pulse of Surat district. It covers an area of 66,723 acres which is the highest among the districts growing *val* in Gujarat State. *Val* is grown extensively in almost all talukas of the district, though the areas of concontrated cultivation are Pardi, Chikhali, Bulsar, Bardoli, and Navsari taluka s. Black cotton soil of the district is extremely suited for the cultivation of this crop.

Val is mainly grown as a *rabi* crop in the *kyari* lands after the paddy crop is harvested. It is sown with the help of a plough in October-November and harvested in February. The yield per acre of *val* comes to about 1,000 lbs. In the field of *val*, a few lines of *sann* are also grown. Many verieties of *val* are grown in the district. One variety namely *katargam val papdli* (*Surat papdi*) is a vigorous climber and is grown in garden lands all over Surat and is very much relished by the people as a vegetable. Improved and mosaic resistant type of *val* are under experimentation.

The green pods are used as vegetable and the ripe pulse is eaten both whole or split in various ways. The husks and broken bits of the *dal* are a concentrate for milch cattle. The leaves and stalks are also utilized as fodder. *Val* is a leguminous crop, hence the fertility of the *kyari* land is maintained to some extent due to its cultivation.

Besides, there are a few more pulses that are grown in the district and relatively smaller areas are under them. Those are *chola lang*, *masur*, *math*, *and vatana*. *Chola* (small fruited dolichos) covers an area of 3,455 acres and is grown in almost all talukas of the district. *Lang* (chickling vetch), a major crop of the neighbouring Broach district, covers a small area of 640 acres only in this district; Pardi, Chikhali and Bulsar account for most of the area under this pulse. *Masur* (lentil) is grown on 274 acres only in the talukas of Songadh and Vyara. *Math* covers 497 acres in Surat. *Vatana* (peas) is a favourite pulse crop of the district and covers an area of 2,218 acres only. It is grown in Vyara and Mandvi.

OIL-SEEDS

Oilseeds account for 58,490 acres in the district which mean 3.34 per cent of the gross cropped area. Out of this, edible oilseeds cover 47,150 acres i.e. 80.6 per cent of the area under oilseeds and the remaining 11,340 i.e. 19.4 per cent are covered by non-edible oilseeds. The chief among the oilseeds grown are *magphali* (groundnut) and *diveli* or *erando* (castor seed). The following statement shows the acreages under various oilseeds in Surat district :—

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OIL-SEEDS

TABLE NO. 17

STATEMENT SHOWING AREA IN ACRES UNDER OILSEEDS IN SURAT DISTRICT (1953 54)

	Edible Oilseeds						Non-edible Oilseeds					
	Ground-nut	Coco-nut	Sesa-mum	Mustard	Others	Total Edible oilseeds	Castor	Dill-seed	Niger seed	Others	Total Non-Edible oilseeds	Total Oilseeds
Bansda	1,370	—	4	—	—	1,374	68	—	140	—	208	1,592
Bardoli	1,063	—	53	—	—	1,116	860	—	—	—	860	1,976
Bulsar	14	—	17	—	—	31	261	—	—	—	261	292
Chikhali	1,365	—	13	—	—	1,378	348	—	—	18	366	1,744
Chorashi	1,337	—	268	—	—	1,605	42	—	—	—	42	1.647
Dharampur	13	—	36	—	4,234	4,283	86	—	—	—	86	4,369
Gandevi	195	—	9	—	—	204	244	—	—	—	244	448
Kamrej	3,637	—	281	10	—	3,928	468	—	—	—	468	4,396
Mahuwa	5,743	—	31	—	—	5,774	256	—	—	—	256	6,030
Mandvi	3,309	—	111	—	—	3,420	714	—	—	—	714	4,134
Mangrol	2,730	—	911	—	—	3,641	1,374	—	—	—	1,374	5,015
Navsari	1,604	—	48	—	—	1,652	931	—	—	—	931	2,583
Olpad	1,463	—	368	23	—	1,854	118	6	—	—	124	1,978
Palsana	1,636	—	50	—	—	1,686	170	—	—	—	170	1,856
Pardi	6	3	31	—	—	40	355	—	—	—	355	395
Songadh	1,449	—	246	—	—	1,695	3,005	—	1,062	—	4,067	5,762
Valod	2,517	—	49	—	—	2,566	305	—	—	—	305	2,871
Vyara	10,847	—	56	—	—	10,903	509	—	—	—	509	11,412
Total	40,298	3	2,582	33	4,234	47,150	10,114	6	1,202	18	11,340	58,490

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OIL SEEDS.

Diveli or Erando.

Diveli or *erando* (castor seed) is an important oilseed crop of the district since olden days, though in recent years its cultivation has shown an appreciable decline. In 1874-75, this crop covered an area of 39,200 and in 1953-54, an area of 11,340 acres only. The taluka of Songadh alone accounts for 3,005 acres under castor seed. It is also grown on considerably larger areas in Mangrol, Bardoli and Mahuva. It is mainly grown as a *rabi* crop. It is grown either alone or mixed with jowar, *tur* and *val*. It is sometimes grown along with groundnut. It is sown in October-November and harvested in February. The per acre yield of this crop comes to about 500 lbs. In 1953-54, total outturn of castor seed in the district was estimated at 1,398 tons. Castor seed is mainly used for extraction of oil which is used for burning purposes and lubrication. It is also used for medicinal purposes. The oil-cake is considered as one of the most valued concentrated manures.

Magphali.

Magphali (groundnut) is grown throughout the district. This crop has grown considerably in importance since 1874-75. It was grown in those days on a negligibly small area, but in 1953-54 it coverd 40,298 acres, of which Vyara taluka alone accounted for 10,847 acres. Mahuwa, Kamrej, Mandvi and Valod are the other areas where ground-nuts are grown extensively. The acreage under groundnut in this district forms 2.3 per cent of the total cropped area and 68.89 per cent of the area under oilseeds.

Groundnut in this district is a *kharif* crop and is sown in July. Before sowing, land is harrowed twice or thrice in May and manure, at the rate of five to eight cartloads of farm yard manure per acre, is applied. The crop is sown with the help of a seed-drill in rows three feet apart. It is ready for harvesting in October-November. The yield per acre comes to 1,000 lbs. of pods. The Agricultural Department has not yet evolved any improved variety of groundnut suitable for the district. Cultivators generally grow the local spreading variety. There is one advantage of growing this variety, that due to its spreading nature, it checks to some extent soil erosion. Groundnut crop is rotated with cotton and jowar in a three year rotation. Being a leguminous crop, it enriches the soil. Groundnut is mainly used for extracting oil which is used for edible purposes. The oil extracted comes to about 45.47 per cent of the seed. Its fodder is liked by cattle and the oil-cake serves as a good nitrogenous manure.

The district also grows some other oilseeds which are comparatively less important. They are *khursani* or *ramtal* (niger seed) covering 1,202 acres; *nariyel* (cocoanut) 3 acres; *rai* (mustard) 33 acres; *sua* (dill seed) six acres; and *tal* (sesamum) 2,582 acres. Sesamum is grown in all the talukas of the district, though Mangrol taluka alone accounts for 911 acres.

DRUGS AND NARCOTICS

Drugs and narcotics have a very small acreage in Surat district. Tobacco, green tea and Ajwan are the only crops under

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DRUGS AND NARCOTICS

this group and cover only 588 acres. The following table shows the area in acres under drugs and narcotics in Surat district:—

TABLE No. 18

STATEMENT SHOWING AREA IN ACRES UNDER DRUGS AND NARCOTICS IN SURAT DISTRICT (1953-54)

	Tobacco.	Green Tea.	Ova Ajwan.	Total.
Bansda	—	—	—	—
Bardoli	20	—	—	20
Bulsar	6	—	—	6
Chikhali	10	—	—	10
Chorasi	90	16	—	106
Dharampur	—	—	—	—
Gandevi	12	—	—	12
Kamrej	88	—	—	88
Mahuva	75	—	—	75
Mandvi	66	—	—	66
Mangrol	69	—	—	69
Navsari	24	—	—	24
Olpad	83	—	19	102
Palsana	10	—	—	10
Pardi	—	—	—	—
Songadh	—	—	—	—
Valod	—	—	—	—
Vyara	—	—	—	—
Total	553	16	19	588

Tamaku.

Tamaku:—(tobacco) is grown over 553 acres only. It is also grown in the compound attached to residential houses. Tobacco is sown in seed beds in July and seedlings are transplanted to fields in August-September. Usually this crop is not watered but 15 to 20 cartloads of farm yard manure is applied for each acre of land. The tobacco plant is not allowed to flower; and all side branches are nipped off as they appear and only 12 to 15 leaves are allowed to remain. Plants are harvested in January-February and are spread in the sun till they are thooughly dried up. The dry leaves are then powdered and used for manufacture of *bidis* (country cigarettes). Tobacco is also used for smoking through pipes for chewing and for making snuff. The yield of dry leaf tobacco comes to 800 lbs per acre.

Green tea and ova are the other drugs and narcotics grown in the district, but the area under them is very small.

SUGARCANE.

The following statement shows area under sugarcane in Surat district:—

TABLE No. 19

STATEMENT SHOWING AREA IN ACRES UNDER SUGARCANE IN SURAT DISTRICT (1953—54)

	Sugarcane.	Other sugars.	Total
Bansda	50	—	50
Bardoli	6	—	6
Bulsar	325	—	325
Chikhali	293	—	293
Chorasi	—	91	91
Dharampur	159	—	159
Gandevi	720	—	720
Kamrej	2	—	2
Mahuwa	159	—	159
Mandvi	2	—	2
Mangrol	—	—	—
Navsari	142	49	191
Olpad	2	—	2
Palsana	1	—	1
Pardi	418	—	418
Songadh	14	—	14
Valod	63	—	63
Vyara	166	—	166
Total ...	2,522	140	2,662

Sherdi.

Sherdi:—(sugarcane) has been cultivated in Surat district since olden days. In fact at the time of the compilation of the old Gazetteer, Surat was known for its sugarcane cultivation and export of *gur* to other districts of Gujarat. In recent years its cultivation has considerably gone down. According to statistics of 1953-54, sugarcane covers an area of 2,522 acres in the district of which Gandevi taluka alone contains 720 acres. Pardi, Bulsar, Chikhali, Vyara, Mahuwa, Dharampur and Navsari are the other talukas where sugarcane is grown on a fairly large acreage.

Sugarcane is sown during December-February and is harvested in November-January, it being a 12-month crop. Lands under this crop are ploughed 5 to 6 times and 30 to 40 cartloads of farm yard manure are applied per acre before the sowing. Ridges and furrows three feet apart are prepared. The cane

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SUGARCANE.

sets are planted and fields are then flooded with water. Cultivators generally, give a top dressing to the sugarcane crop of 120-170 lbs. of Nitrogen and 50-100 lbs. of phosphate per acre. The nitrogen dose consists of one part of sulphate of ammonia and two parts of groundnut cake and is given in four instalments at an interval of one month right from the time of planting. The last dose is applied at the time of earthing. Superphosphates (P 205) are applied to the crop two times-once at the time of planting and secondly at the time of earthing up.

Nearly the entire area under sugarcane in the district is under the Co-419 which has been introduced by the Department of Agriculture in place of the local ones. It yields cane 15 to 20 per cent higher than the local variety. The brix of this cane varies from 20" to 22". The cane is crushed to obtain juice for making *gur*. The *gur* yield per acre has been estimated at 7,000 lbs. Top sets of this cane cannot be used for fodder as this variety is of a flowering type.

Fodder crops, particularly grass and *babuls*, account for nearly 26 per cent of the districts gross cropped area. Fodder crops cover an area of 4,65,980 acres of which grass and *babuls* alone account for 4,65,990 acres. In fact, Surat district not only provides fodder for itself but even supplies large quantities of green fodder to the neighbouring districts and to Bombay city. The following table gives the acreage under various fodder crops in Surat district:

CONDIMENTS AND SPICES

TABLE No. 19A

STATEMENT SHOWING AREA IN ACRES UNDER FODDER CROPS IN SURAT DISTRICT (1953-54)

	Lucerne	Hot weather Jowar.	Field wetch.	Guinea Grass	Grass and Babuls.	Other Fodder Crops.	Total Fodder Crops
Bansda ...	—	—	—	—	17,515	—	17,515
Bardoli ...	—	--	--	16	19,912	33	19,912
Bulsar	—	-	--	--	57,575	—	57,575
Chikhali ...	—	—	—	---	53,949	—	53,949
Chorasi ..	—	153	—	—	24,517	451	25.121
Dharampur ...	—	—	—	--	32,156	3	32,915
Gandevi ..	—	—	—	—	19,741	—	19,741
Kamrej ...	13	—	128	—	17,901	—	18,042
Mahuva ...	1	—	—	—	18,193	—	18,194
Mandvi ...	—	—	—	---	22,902	4	22,906
Mangrol ...	—	—	—	—	23,982	—	23,982
Navsari ...	34	—	59	—	37,151	—	37,244
Olpad ...	—	—	—	—	14,519	20	14,539
Palsana ...	39	—	—	--	10,985	—	11,024
Pardi ...	—	—	—	---	50,177	—	50,177
Songadh ...	36	—	—	—	18,288	—	18,324
Valod ...	—	—	—	—	8,216		8,216
Vyara ...	—	—	—	—	17,129		17,129
Total ...	123	153	187	16	4,64,990	511	4,73,980

Condiments and spices occupy relatively a very small area in the district. Only 2,654 acres are under this group of crops and the chilly is the only important crop in this group. The following table shows the area under various condiments and spices in Surat district:—

TABLE No. 20

STATEMENT SHOWING AREA IN ACRES UNDER CONDIMENTS AND SPICES IN SURAT DISTRICT (1953-54)

	Chillies	Ginger	Pepper	Turmeric	Coriander	Garlic	Fenugreek	Others.	Total
Bansda	9	—	—	—	—	—	—	—	9
Bardoli	35	7	—	—	—	17	2	—	61
Bulsar	69	—	—	20	—	40	...	—	129
Chikhali	48	1	—	32	—	5	5	—	91
Chorashi	795	1	—	2	—	8	—	17	823
Dharampur	8	—	4	—	—	—	—	—	12
Gandevi	88	8	91	—	—	—	14	156	357
Kamrej	114	2	—	4	—	11	—	—	131
Mahuwa	34	2	—	5	—	1	—	—	42
Mandvi	54	4	—	—	—	3	—	—	61
Mangrol	71	—	—	—	—	—	—	—	71
Navsari	217	12		—	—	28	28	7	292
Olpad	266	—	—	—	—	—	—	—	266
Palsana	122	39	—	19	—	—	—	—	180
Pardi	33	—	—	—	—	—	—	—	33
Songadh	9	—	—	—	—	—	—	—	9
Valod	34	—	—	—	1	13	—	—	48
Vyara	39	—	—	—	—	—	—	—	39
Total ...	2,045	76	95	82	1	126	49	180	2,654

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CONDIMENTS AND SPICES

Marcha.

Marcha (chillies) covers about 77 per cent of the district's total acreage under condiments and spices. The district has 2,045 acres under chillies and are grown in all the talukas of the district. The Chorashi taluka alone accounts for 795 acres. Olpad, Navsari, and Palsana talukas are the other areas where chillies are grown considerably. Chillies are sown in May in specially manured seed beds and seedlings are ready for transplanting within a month. Seedlings are transplanted to fields which are specially irrigated earlier. Fields are harrowed two to three times and 10-12 cartloads of farm yard manure per acre are also applied. The plants begin to bear fruits in about two months and continue yielding chilli fruits for about six months. The yield per acre of dry chillies comes to about 400 lbs. Chillies are eaten both green and ripe by all classes of people.

The other condiments and spices, which are grown in the district, are *Adu* (ginger), *dhana* (coriander), *haladar* (turmeric), *lasan* (garlic), *mari* (pepper) and *methi* (fenugreek). But acreages under these crops are very small.

FIBRES.

Fibres, particularly cotton, dominate the entire rural economy of Surat district. They cover an area of 3,00,029 acres of land, that is 17.15 per cent of the district's area under crops. Of these about 98.42 per cent is under cotton. The other fibre crops, namely, Bombay hemp and jute cover relatively negligible areas. The following statement shows the area under cotton and other fibre crops in Surat:—

TABLE No. 21

STATEMENT SHOWING AREA IN ACRES UNDER FIBRES IN SURAT DISTRICT (1953-54)

	Cotton.	Jute.	Bombay Hemp.	Total.
Bansda	3,430	—	159	3,589
Bardoli	26,270	53	—	26,323
Bulsar	1,074	—	185	1,259
Chikhali ..	6,469	286	-	6,755
Chorashi ..	21,050	—	—	21,050
Dharampur ..	—	—	82	82
Gandevi ..	3,577	134	--	3,711
Kamrej ...	30,176	—	25	30,201
Mahuwa ..	13,020	—	66	13,086
Mandvi	21,008	363	—	21,371
Mangrol ..	47,713	2,356	—	50,069
Navsari ...	25,960	235	—	26,195
Olpad	44,123	2	—	44,125
Palsana	13,538	—	—	13,538
Pardi	—	—	202	202
Songadh ...	9,390	—	108	9,498
Valod	9,358	33	20	9,411
Vyara	19,406	158	—	19,564
Total ...	2,95,562	3,620	847	3,00,029

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KAPAS.

Kapas:—(cotton) is the most important among the agricultural crops that are grown in the district. About 16.9 per cent of the district's gross cropped area is under cotton-largest among individual crops. This district has been quite famous for its cultivation of cotton since earliest times and even today it occupies a pre-eminent position in the cotton economy of India.

At the time of compilation of the old Gazetteer, cotton covered an area of 59,234 acres in Surat but during the passage of nearly eighty years thereafter this crop has expanded very much and at present nearly three lacs of acres are reported to be under cotton.

The following figures show the acreage under cotton in Surat district during the period between 1943-44 and 1953-54.

Year.	Area in acres under cottton*
1943-44	3,26,875
1944-45	2,34,141
1945-46	2,18,734
1946-47	2,19,810
1947-48	2,36,485
1948-49	2,57,322
1949-50	2,17,530
1950-51	2,87,244
1951-52	3,21,684
1952-53	3,13,753
1953-54	3,04,186

These figures show that area under cotton in the district decreased from 3,26,875 in 1943-44 to 2,18,734 acres in 1945-46. This was mainly due to the State Government's policy to restrict area under cotton and to promote cultivation of food crops. Under the 'Grow More Food compaign,' cultivators were not allowed to grow cotton in areas more than those specified by Government. The other areas were to be sown with foodgrains. In 1947-48, the ban or growing non-food crops was relaxed and consequently some increase in the cotton area of the district was noticeable. This increase continued till 1948-49 but in the very next year due to abnormal weather conditions, the area under cotton declined a little. Later on, cotton cultivation improved on account of the changed Government procurement policy in

* Surat cotton area includes some portions of neighbouring W. Khandesh and Broach district besides revenue district of Surat. Hence these figures are slightly in excess of those figures given in the table No. 21 above.

1950-51 and also due to increased demand for raw cotton by the manufactures in India. The increasing trend has been maintained to this date.

During the period between 1944 and 1954, the production of cotton in Surat district was as follows:—

Year.	Production of cotton in Bales (each of 392 lbs.)
1944	1,49,989
1945	40,806
1946	59,151
1947	70,403
1948	85,020
1949	43,608
1950	82,730
1951	86,395
1952	69,460
1953	84,925
1954	1,18,028

Area and regions etc

Mangrol, Olpad, Kamrej, Bardoli, and Navsari together account for 58.9 per cent of the district's area under cotton, the highest percentage being in Mangrol, which accounts for 16.14 per cent of the district's total, Olpad, Kamrej, Bardoli and Navsari accounting for 14.92 per cent, 10.20 per cent, 8.89 per cent and 8.78 per cent respectively. The remaining 41.1 per cent is distributed over the talukas of the district, chief among them being Chorasi, Mandvi, Vyara and Palsana. Cotton is not grown in Dharampur and Pardi. Its cultivation is chiefly concentrated in the deep rich black soils of the district.

Commercial Varieties.

The commercial varieties of cotton grown in the district were *Surti local* till 1919, when an improved variety namely *1-A Long Boll* was introduced. Both these varieties were grown in the district till 1923 and a third variety namely *1027. A. L. F.* was introduced in that year. In the year 1943, another better variety- called *suyog* (Seg- 8-1) was evolved and introduced. Till 1947 it was *Suyog* that was mainly grown though the *Surti Local 1-A Long Boll* and *1027 A. L. F.* were also grown for sometime in a mixed form. From 1947 to 1951, *Suyog* was the only commercial variety found in the district. In 1951, a better variety, 2087, was introduced and it is fast spreading in the district. It is expected that very soon this variety will cover the entire area

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FIBRES.

under cotton in the district. According to the statistics of 1953-54, the district's cotton area was divided among the varieties as follows:

		Ares
(1) *Suyog*	(a) Area under Departmental control	1,10,878
	(b) Area under seed distribution ...	1,52,595
(2) *2087*	(a) Area under Departmental control	40,713
		3,04,186

Favourable Soils.

The soils in this district are deep (4' to 6'), black and clayey, expanding on wetting and cracking deeply and widely on drying. The cracking of soil is considered to be a great advantage as it leads to the surface soil being mixed up with sub-soil either during the process of cultivation or during the first showers of monsoon. The flow of water into the crackes, carrying with it a large amount of surface soil, leads to the absorption by the soil of a very large amount of initial rain upto Seven or Eight inches in one continous fall without surface wash or erosion. Though the soil at the first monsoon is capable of absorbing an enormous quantity of water, once the cracks are filled up and the soil is saturated, the water is drained away so slowly that it can absorb further water with difficulty. If the rains are continuous and heavy, erosion takes place, water stagnates on the surface and signs of water-logging can be seen. The soils are more or less alluvial in nature and highly retentive of moisture, though the character of the soil varies from light *Gorat* type in a few parts to *Besar* and typical *Black Cotton* soil in a majority of the area. All varieties of cotton grown in the district are suitable for these different varieties of soils.

Favourable Rainfall and temperatures

Cotton grows best where the rain-fall ranges between 20 and 30 inches, though in some localities the precipitation might be even about 60 inches. In Surat district, the annual average rainfall varies from 30" in the North to 60" in the South, and is entirely received from June to October-July being the month of the heaviest rainfall, recording on an average about 40 per cent of the season's total. Moderate showers alternate with sunshine in August. Sometimes heavy rains are received in the second fortnight of September. There are practically no rains after October. If sometimes they occur, they may even prove detrimental to the crop.

Temperature.

The temperature in this district ranges from 58° F. in January (average minimum) to 100° F. in April (average maximum). The occurance of frost is rare. Humidity is generally higher in the south than in the other parts of the district. This is believed to be one of the factors contributing to the better quality of cotton from Navsari area situated in the south.

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The preparatory tillage of cotton lands begins by about the end of April and it consists of three or four harrowings with a blade harrow. Thereafter the lands are manured and the usual local practice is to apply 10 cartloads of cattle-dung manure per acre of cotton lands once in every five years. Cotton seeds are sown either by the dibbling method or by drilling, the former method being particularly useful when the soils are too wet for operation with the help of bullocks. The seed rate is about 6-10 lbs. per acre and space between the rows varies from 5'×2' to 8'×3'. Then four or five interculturings with a blade harrow and two or three weedings are given. The inter-tillage operations cease by October. There is practically no difference in the methods of cultivation in different cotton regions of the district as well as with the different varieties of cotton grown in the district.

The crop is sown normally by the end of June or beginning of July and lasts till the end of July or middle of August in low-lying fields. The period of most rapid development of the plants is from the middle of September to the end of October i. e. after the rains are practically over. The crop is thinned out to the required distance before September, when the temperature is pretty high. The crop in the normal years flowers in the month of December and pickings commence by the beginning of March. Usually, three pickings are done, each at an interval of a fortnight. The average yield of seed cotton for the district comes to 380 lbs. per acre, giving about 140 lbs. of lint. In 1953-54, total yield of cotton was estimated at 1,93,742 bales. The produce is sold by the farmers in the form of seed cotton through the agents of cotton sale societies, local cotton merchants and also through the agents of the upcountry buyers. These agents pool the cotton, get it ginned, and sell the same to manufactures in the form of fully pressed bales.

Rotation.

Usually, cotton is rotated with jowar, in a two year rotation, the latter being generally mixed with *tur* and other pulses. In some parts of the district where the soil is suitable for groundnut, cotton is rotated with groundnut followed by jowar.

Pests on Cotton.

The cotton crop of this district is susceptible to the following pests:—

Cotton stemborer:—(Sphenotera gossypii): This is a beetle of dark brown colour which lays eggs on the bark of the cotton stem. The larva emerging from the egg, white in colour and over an inch in length when full grown, enters the stem and feeds inside. Before pupation, it makes a hole in the stem through which the adult emerges in about a week or ten days time to carry on the cycle again and again. The pests attack the plant during the entire period of flowering and picking with the result that the cotton plants die. The larvae could be seen by splitting up the dry plant. The best method to control this pest is to

promptly remove the affected dry plants and destory them by burning along with the larvae inside.

Cotton Leaf Roller:-(Sylepta derogata) : The caterpillars, which are green in colour with a bluish mouth, roll up the leaves and feed on the green matter from the border of the leaves while remaining hidden in the rolls. By and by the entire leaf is eaten up. Damp and cloudy weather favours the growth of this pest. The moth, which has yellowish wings with brown way markings, lays eggs singly on the under surface of the leaf from which caterpillars emerge after two or three days. The caterpillar, when fully grown, measures an inch in length and pupates in the roll after about a fortnight. The pupa, from which the moth emerges after a week to lay eggs again, is red in colour. The Department of Agriculture has been recommending the following measures to control this pest:-- (1) all rolled up leaves containing caterpillars may be removed and burnt; and (2) in the case of a heavy infestation, the crop should be dusted with a mixture of sodium fluosilicate and ash in the proportion of 1 to 8 or with 5 per cent D. D. T. mixture.

(3) *Spotted Boll Worm*:—(Earias Fabia and Eanas in sulana): The caterpillars of both the species are brownish white in colour and have a dark head and a prothoracie shield. They have a number of black and brown spots on their body. A full fed larva measures about two-thirds of an inch. This pest appears in the cot ton fields after the close of the monsoon when the cotton crop is in vigorous growth. In the early stages i.e. in September and October, this pest destorys a large number of vegetative shoots, later on destroys the flower buds with the result that damaged buds and bolls fall down. The other bolls are also affected and the yield of cotton is considerably lowered. The larva population is comparatively high during the months of November and December but declines by the end of December or beginning of January due to cold season and parasites in the field. The usual control method is to uproot the cotton and other *malvaceous* plants growing round about during the off season in order to prevent the carrying over of the pest. The affected plants are collected and burnt along with the larva population.

(4) *Pink Boll Worm*:—(Platyedra gossij pialla) : This moth measures about half an inch across wings and is dark brown in colour. The full fed caterpillar measures about two-thirds of an inch. The caterpillar is whitish in the beginning and turns to pinkish colour as it grows up. The mouth is rather dark. The caterpillars feed inside the bolls and make them drop down. This pest is more destructive to the American cotton than to the indigenous varieties. Unlike the spotted boll worms, these caterpillars never attack the shoots. This pest damages the crop by destroying the seed, spoiling the lint and causing defective opening of the boll. The larva generally pupates in the seed.

The remedial measures for this pest are of a preventive nature. The pest is carried to new areas through the infested seeds and the larva remains in a dormant stage till favourable conditions obtain. So to avoid this, the seeds should be got fumigated with carbon bisulphide or heated to a temperature of about 140° F. As a further measure, the cotton plants should be removed immediately after the pickings are over and the stalks should be burnt so as to destory the pest hibernating in the unripe bolls.

(5) *Cotton Aphid*:--This is sometimes a serious pest on cotton. This pest is a small green or dark yellowish insect which multiplies rapidly. It abounds the lower surface of the leaf and gives out sugary juice which makes the leaves stickly. Usually, it is controlled by its natural enemies i. g. parasites. When the infestation is limited to a small area, it is found useful to spray the plants with contact insecticides like tobacco decoction, fish oil rosin soap, kerosine emulsion etc.

(6) *Red cotton Bug*;.-(Dysdercus Cingulatus). The adults and nymphs (wingless) of this pest are bright red in colour with white strips on the under surface of their body. The adults lay eggs in the soil. This pest sucks the sap of the bolls. They also feed on the seeds and thus lower their oil content. Due to the excreta of these insects, the lint is soiled. The infested seeds are useless for sowing purposes. The adults and nymphs of this pest can be collected in large numbers by shaking the plantsin a tray containing a little kerosine oil added to water. Another measure is to put traps of cotton seeds near the stem of the plant so that the insects, which like to suck the cotton oil, will cling to the cotton seeds. Deep tillage of lands after the harvest of crop is found useful in destroying eggs remaining in the soil.

(7) *Dusky cotton Bug*:--(Oxycaremes Lactus) The adults and nymphs, small and ashy in colour, are found feeding on the seeds and lint of cotton. The nymphs, after the first moult, become reddish brown, and their colour darkens after each moult, ultimately becoming dusky. The whole life cycle of this pest is completed within 10 to 12 days and the insects multiply very rapidly. To control the pest, infested bolls can be shaken in a vessal containing water mixed with kerosine. The diseased bolls with defective boll opening can be removed and destroyed by burning along with insects infesting them.

(8) *Cotton Jassids*:--The nymphs and adults of this pest are very small in size and pale green in colour, and are found in large numbers on the lower surfaces of leaves. They pierce the plant tissues and suck the cell sap by their sting. Initial damage is noticed when the borders of leaves become yellow, and it continues etiolation of the leaves and thereby resulting in the stunted growth of plants. The leaves turn reddish at the end and give an idea of the red leaf blight. These insects do not usually

attack *deshi* cotton varieties but the American cottons are highly susceptible to this pest.

(9) *Cotton Thrips*:–These insects are very tiny and delicate, and light yellow in colour. They are found in large numbers mostly on the lower side of leaves, but they feed on the upper surfaces also. They suck the cell sap of the leaves which dry up and become whitish brown. The symptom of brown patches may also appear on bolls. These are characteristic symptoms of injury by thrips. The pest is particularly active during the latter part of the monsoon. It becomes serious in the months of September and October, especially in years of failure of the late rains. Generally, American varieties of cotton are attacked by this pest. It can be controlled by spraying the affected part of the crop with 5 per cent D. D. T. mixture. If the infestation is heavy, dusting may have to be repeated at an interval of a fortnight, till the infestation is brought under control.

Diseases.

Among diseases of cotton, *cotton wilt* is seen scattered in patches in some parts of the district, particularly in Vyara taluka; *root rot* is seen at times in patches of soils of sandy nature.

Wilt.

The wilt disease on cotton is caused by Fusarium Vasinfectum which is highly specialised in its parasitic relations. In cotton wilt, the air temperature plays an important part in the expression of wilt symptoms. The fungus may establish in the root tissues at lower temperatures (about 20 °*c*) and further invade the root system with an upward ascent into the stem leading to wilting. The wilted plant shows symptoms of partial drying in the initial stages which ultimately dries completely. There is no remedy for this disease since it is soil-borne. But recently the Department of Agriculture in collaboration with the Indian Central Cotton Committee has evolved a wilt resistant type of cotton suitable for the district namely 2,087 variety.

Root rot.

The *root* rot of cotton, caused by *macrophomina phaseoli*, usually does not occur in the district except in scattered patches of marked sandy nature.

Attempt towards improvement of cotton varieties.

The present Surat district is composed of the Old Surat district as well as the Navsari district of the old Baroda State. But for the purpose of cotton cultivation, it is since long known as one district and included in the tract known as Surti cotton tract. Besides Surat district, the tract also includes a part of Broach district lying south of the Narmada, and Nawapur and Akkalkuwa talukas of West Khandesh district. At present, this tract grows cotton on about five lakh acres of land. According to the Cotton Transport Act of 1923, it is a protected area where no cotton from outside is allowed to enter for purposes of either cultivation or trade. Concurrently, there is systematic multiplication and distribution of pure seed of improved varieties

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recommended from time to time by the Agriculture Department for general cultivation in the tract. Formerly, cotton of this tract for the purposes of trade was classified as "Broach Cotton." The Broach cotton area was sub-divided into three tracts.

(1) Portions of Broach district lying north of the river Narmada and adjacent to parts of Baroda district with some outlying areas of Saurashtra;

(2) The southern part of Broach district as well as the northern part of the Surat district.

(3) The remaining portions of Surat district of which the chief centre was Navsari.

No definite boundary could be laid down between the second and the third tracts. The cotton of the whole Broach tract reached its maximum excellence at Bilimora in the Navsari district of the old Baroda State. Throughout the whole Broach cotton tract, except for the small scattered area of Bourbon cotton (Gossypium purpurasceus) which was grown for domestic purposes, only one species of cotton namely Gossypium Herbaceum was found. The position in the Broach cotton tract was that the value of cotton grown in the southern parts was more than that of cotton grown in the northern areas. This is true even to-day. The superiority of the cotton grown in the Navasari area is due to the genial climate, resulting from its proximity to the sea and to the slightly higher proportion of humidity in the air and of clay in the soil.

18th Century.

For improving cotton of this tract, earlier attempts were all directed towards introduction of exotic cottons. The history of these attempts commences from about 1790 when Dr. Anderson was employed to distribute seed from Malta and Mauritius the Peninsula. The Bourbon cotton, which is still to bef ound throughout in Konkan and in some other parts of the State, is a relic of his work.

19th Century.

A fresh supply of seed was obtained from Mauritius in 1812 and was distributed to the Collectors of Broach and Surat. But their effort bore no fruit. About 1830, two experimental farms were opened in India one at Broach and the other at Dharwar in charge of Mr. Finney and Dr. Lush respectively. Neither of them left any mark on cotton in Bombay. In 1840, twelve American planters were brought to India, of whom three were allotted to Bombay, who started their work at Broach. But they could not carry on their work and resigned their appointments. Inspite of this, the experiments were continued with no more fruitful results. A cotton commissioner was appointed for the Bombay Presidency in 1863 the first incumbent of the post being Dr. Forbes. Shortly afterwards, four superintendents of cotton experiments were also appointed, one of whom was posted in Gujarat. Trials of *Sea Island*, *Egyptain*, *Peruvina* and

other exotic cottons were carried out at Surat and other places without any success. In 1883, the work of the Cotton Department was taken over by the Department of Land Records and Agriculture. The history of cotton improvement for the next few years was almost entirely that of experiments with American and other varieties. It was proved that long staple varieties, though not successful when sown at once as received from America, would succeed well if acclimatized and also that such cottons were useful on light lands. By 1897, Mr. Mollison, the then Deputy Director of Agriculture, had come to the conclusion that exotic varieties of cotton were unsuited to the conditions of agriculture in India and the only hope of improvement lay in trying to improve the varieties which were found in general cultivation.

The main botanical work on *Broach Cotton* was commenced at Surat in 1896, the object being to establish a variety of long and silky staple of sufficient hardness to pay the cultivator to grow it.

20th Century. 1901-1920.

Due to the famine of 1900, there was a shortage of cotton seed for sowing and, unfortunately, an inferior variety of *Gossypium Herbaceum*, known as *Ghoghari* found its way into this tract. It had weak staple length (4/8" to 5/8") and a ginning percentage of 40. The high ginning percentage of this variety, however, brought it into such favour with the cultivators that it spread rapidly in the entire Broach Deshi Tract and this brought down the reputation of the Broach cottons. It was, therefore, felt necessary to do some crossing work to replace the Deshi variety. It resulted in the evolution of new varieties like 1338, 1339, and 1027 A. The variety of 1027 A-a cross between the *Kumpta* and the *Ghoghari*, was valued as high as 20 per cent above the ordinary cotton of the tract. In 1907, however, it was found that there was consideable variation in the *Surat* crosses and that whilst the relative advantage in quality was high, their ginning percentage was steadily falling. In 1910-11, the work on the Surat farm was narrowed down to the study of three types namely "Selected Surat" and two crosses known as 1018 P G. and 1027 A.L.F. (i. e. 1027 A Long and Fine). 3,000 acres were sown with these cottons. In the following year, matters had progressed so far that a syndicate was formed by some members of the Bombay Mill-Owners Association which undertook to buy the cotton grown from the improved seed at a rate 5 per cent above the market rate and also to return the seeds to the Agricultural Department for further distribution. This scheme, however, did not prove a success and the operations of the syndicate ceased in the year 1912-13. The improved seeds of strains given out by the Agriculture Department from the Surat farm were then grown in six or seven villages which were formed into a group. The cultivatiors in each village selected a member to serve on the Divisional Committee of which the Divisional Superintendent of Agriculture was the chairman who supervised everything

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connected with cotton from the distribution of seed to the marketing of cotton. The produce of these villages obtained a premium of Rs. 12 per *khandi* over the other local cottons and the purchasing firms gave back the seed to the Agricultural Department for further multiplication and distribution. Still, the general cultivation of the improved cottons could not be promoted and the area under these varieties was estimated only at about 1,200 acres in 1918-19. In the meantime, a further selection was made from 1027 A. L. F. and the present 1027 A. L. F. is a pure line derived from an individual plant selection made in 1917-18.

The "Surat Selection" was called 1-A Long Boll which was superior to the Surati Local in yield and ginning percentage. The value of selection 1-A and 1027 A. L. F. as compared to Surti Local was as follows:-

(Recorded by the Indian Cotton Committee, 1919),

	Surati Local	1-A Long Boll.	1027 A.L.F.
(1) Per acre yield of seed cotton in lbs. ..	503	559	519
(2) Ginning Percentage	33.2	36.5	35.4
(3) Value of cotton per Khandi (Rs.) ...	332	341	346

1921-1930

The seed of selection 1-A was distributed from 1919-20 onwards. But the progress of distribution was not at all satisfactory, as the quality was not suitable for the tract. In 1923, strain 1027 A.L.F. was adopted for general cultivation on the recommendation of the Indian Central Cotton Committee which had also begun to function by that time. Its staple length was 0.95 inch as against 0.85 inch of the Surti Local and 0.86 inch of Selection 1-A. It had a silky feel and was considered to be equal to middling American cottons. It represented the high water mark for quality among Indian cottons and had been reponsible for re-establishing reputation for quality cottons of the Surat tract which was, for a while, at stake due to great popularity of the short and coarse Ghoghari variety because of its high ginning percentage.

Since the introduction of 1027 A. L. F., growing of inferior Ghoghari type was prohibited by legislation. The Surat cotton tract was also declared as a protected area under the cotton Transport Act of 1923 for maintaining the purity and reputation of the said variety. The earlier distribution of the high ginning, medium quality strain 1-A Log Boll had created such a situation that in regard to monetary returns it always remained a rival to 1027 A. L F. which inspite of its superior quality could not cover more than 50 per cent of the cotton area of the tract. There was a tendency on the part of the farmers to grow 1-A Long Boll either by itself or as a mixture, as 1027 A. L. F. could not secure adequate premium over 1-A Long Boll to

compensate for its lower yield and lower ginning percentage. It became necessary to increase the ginning percentage of 1027 A.L.F. Moreover, the variety 1027 A. L. F. was found to be rather a delicate one, not very adoptable throughout the tract. With a view to overcome these defects, a cross was made between 1027 A. L. F. and 1-A. Long Boll in 1930. The period between 1921-1930 marked the growth of cooperative cotton sale societies, in the district. A Farmers' Cooperative Ginning factory was established at Rander in 1926. In 1930, the union of all cooperative cotton sale societies was also established.

1931-1940

This period was quite important in the history of the development of cotton of the Surat tract. Though the Agriculture Department had stopped the spread of 1-A Log Boll variety and was distributing 1027 A.L F. cotton seed for sowing purposes, the latter variety was not making satisfactory progress while the former one was still persisting in the tract. Side by side, cooperative cotton sale societies movement was rapidly making progress and the societies were co-operating with the Agriculture Department in the distribution of improved seeds. Another farmers co-operative ginning and pressing factory was established at Surat in 1934. Some of these societies made representation to Goverment favouring the 1-A.L. B. variety. The Bombay Government and the Indian Central Cotton Committee in the year 1938 decided to distribute the seed of 1027 A. L. F. in the whole of the tract except in the Olpad Taluka where it was decided to distribute 1-A.L.B. In the meantime, the types evolved from the cross of 1027 A.L. F. and 1-A. L.B. were being tested in the district.

1941-1948

After sufficient trials of the new strains, it was decided in 1942 to distribute seed of a synthetic type segregate 8-1, which was named as "Suyog" and a regular scheme was brought into operation in 1945 by the Indian Central Cotton Comittee for the spread of Suyog in the areas of Surat and Broach districts situated in the Surat Cotton tract. The new strain was a good compromise between 1027 A. L.F. and 1-A.L B., as it combined the quality of long staple of the former and high ginning percentage of the latter. The average performance of 1027 A.L.F. and Suyog in comparative trials during 10 years (1936-37 to 1946-47 was as follows:—

	1027 A. L F.	Suyog
(1) Yield of seed cotton per acre (lbs).	470	498
(2) Ginning Percentage.	35	38
(3) Mean Fibre length in inch.	0.94	0.92
(4) Spinning value (H.S.W.C)	32s	29_s

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The extra profit per acre for Suyog variety worked out at Rs. 10, on tthe basis of above results.

During this period, the work of the cotton sale societies made good progress. And it was, therefore, made possible to organise the seed distribution and multiplication work thorugh these co-operatives which pooled and ginned their cotton and maintained the purity of the seed in different stages of multiplication. Hence, it was possible to remove the inferior cotton selection 1-A. L. B. from the general cultivation in the district.

1949-1953

After evolving *Suyog*, the Surat farm directed its attention towards evolving those types which combined the staple length and silky feel of 1027 A.L.F. with higher yield and ginning percentage. In certain areas of the district, particularly in the north of the river Tapi, there was an additional problem of eradicating the wilt disease caused by fungus *fusarium vasinfectum* ATK, which took heavy toll of the cotton crop. For such areas, a wilt resistant type possessing all other desirable economic characteristic was required.

As a result of further research work on the improvement of cotton through hybridization, a synthetic strain namely 2087 has been evolved from the back cross, Vijay (1027 A.L.F. x vijay) in 1949. This new strain is ready earlier than Suyog, and almost completely wilt resistant. On an average, it gives about 40 lbs. more yield of seed cotton per acre and approximates Suyog in high ginning percentage. Its fibres are longer and finer than Suyog, resulting in better spining performances. The average comparative performances of the strain 2087 as compared with that of Suyog for three years (1949-50 to 1951-52) was as follows :—

	Suyog.	2087.
(1) Per acre yield of seed cotton (lbs.)	479	523
(2) Ginning Percentage	36.6	36
(3) Mean fibre length (inch)	0.93	0.94
(4) Mean fibre weight per inch	0.93	0.94
(5) Spinning value (H.S.W.C.)	33's	37's
(6) Susceptibility or otherwise to wilt disease	Susceptible.	Resistant.

On account of longer and finer fibre and better spinning value, the lint of the strain 2087 fetches higher value than Suyog by about Rs. 40 to 50 per Khandi of 784 lbs.

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Because of its higher yield of seed cotton, the agriculturists obtain about Rs. 25 per acre more than the other variety.

This 2087 strain has become popular in the district and a regular seed distribution and multiplication scheme has been launched in the district since 1953. In the year 1953-54, 40,713 acres were reported to be under this strain in the district and it is expected that the district's entire cotton area would be shortly covered by this new variety.

At the Surat farm, further research work is going on to evolve wilt resistant types of cotton, possessing staple length of over an inch with better yield and higher ginning percentage.

The following is a comparative statement showing the main characteristics of various varieties of cotton evolved in the district during the period 1930-1953 :—

	Surati Local.	Selection 1-A.L.B.	1027 A.L.F.	Suyog (Seg-8-1).	2087.
1. Per acre yield of seed cotton (lbs.) ...	330	420	360	370	400
2. Ginning percentage.	33.5	38.0	34.0	37.0	37.0
3. Mean fibre length (inch) ...	0.85	0.86	0.98	0.94	0.96
4. Mean fibre weight per inch (oz) ...	—	—	0.183	0.194	0.170
5. Spinning value (H. S.W.C.) ...	24	28	35	32	34
6. Resistance to wilt disease or otherwise.	susceptible.	susceptible.	susceptible.	susceptible.	Highly Resistant.
7. Cash value per acre in Rupees ...	131	175	173	177	200

FRUITS.

The district is famous for fruits and is second only to East Khandesh in total acreage under fruits which was 23,811, acres in 1952-53. Mango and banana are the principal fruit crops grown in the district. *Chiku* accounts for about 3/4th of the area under other fruit trees. As far as the banana crop is concerned, the area of its cultivation in the district is surpassed only by that of East Khandesh where the acreage under this fruit crop is over 20,000 acres against about 7,000 in this distict.

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The following table shows the area under various fruits grown in Surat district :—

TABLE No. 22

STATEMENT SHOWING AREA IN ACRES UNDER FRUITS IN SURAT DISTRICT (1953–54)

	Banana.	Mangoes.	Limes.	Pine-apple.	Papaiya	Other fruits.	Total Fruits.
Bansda ...	4	75	—	—	—	—	79
Bardoli ...	1,168	78	—	—	—	—	1,246
Bulsar ...	115	6,343	—	—	—	—	6,458
Chikhai ...	75	2,253	—	—	—	1	2,329
Chorashi ...	1,451	672	3	—	7	36	2,169
Dharampur	39	208	—	—	—	—	247
Gandevi ...	419	2,468	—	14	—	156	3,057
Kamrej ...	520	97	61	—	—	—	678
Mahuwa ...	8	114	—	—	—	—	122
Mandvi ...	123	—	—	—	—	—	123
Mangrol ...	—	—	—	—	—	—	—
Navsari ...	616	832	7	—	—	—	1,455
Olpad ...	107	—	—	—	—	25	132
Palsana	1,403	152	—	—	—	—	1,555
Pardi ...	87	4,366	—	—	—	170	4,623
Songadh ...	1	—	—	—	—	—	1
Valod	80	16	—	—	—	—	96
Vyara ...	30	—	—	—	—	—	30
	6,246	17,674	71	14	7	388	24,400

Ambo

Ambo, i.e., mango is the main Indian fruit rightly known as king of tropical fruits. It is found growing almost anywhere in the district. It would not be any exaggeration to say that no village will be found in the district without a few mango trees. It accounts for an area of over 16,000 acres, which is much more than in any other single district of Gujarat State. Ratnagiri, the other district famous for its *Alphonso*, has less then 8,000 acres under this fruit. Commercial cultivation of the fruit is, however, restricted mainly to the four south-western talukas of Bulsar, Pardi, Chikhli and Gandevi. The fruit can grow in the wide variety of soils, but does best when grown on well drained and fairly deep loamly soils. A fairly high percentage of moisture in the soild throughout the year is essentilal for its normal growth and fruiting, and that is why its cultivation on a commercial scale is restricted to high

rainfall areas of the south-western portions of the district. Normally, the full grown mango trees are not irrigated, but application of a couple of irrigations after the fruit-set results in better yields. Rainfall and cloudy weather during the flowering period have an adverse effect on the crop as they prevent pollination and set of crop, and also encourage pests and diseases.

The seedlings produced from seed obtained from the best selected fruits even do not result in production of uniformly good quality fruit, but on the contrary produce fruits of poor quality. In view of this, the best plantations are established by the use of plants propagated by vegetative means. The plants are raised either by inserting a bud from the chosen tree on to a seedling plant grown from seed selected from a vigorous growing tree or by joining such seedling grown in a pot to a 1-2 year old branch of the selected tree. These methods of propagation are known as budding and grafting respectively. The principal commercial variety of the district is the *Alphonso*, though of latea number of local varieties like *Rajpuri*, *Jamadar*, *Karajio*, *Vanraj*, *Kesar*, *Dadamio*, *Sardar*, etc. have been receiving attention from the growers principally because of the fact that these varieties become available in the market much after the *Alphonso*.

The plants are usually spaced 40 feet apart and the young grafts are irrigated during the first three or four years till they are well established. All sorts of intercrops can be grown in the mango orchard when the trees are young, but when they are fully grown no intercrop can be taken. It is, however, advisable that some sort of crop either in the form of a green manure crop or grass should be allowed to grow in the orchard during the rainy season, when there is excess of moisture, but afterwards no crop should be allowed to grow. The grafted trees begin to bear fruit in the 5th year of their life in the orchard, but the maximum yield is not obtained till the trees are 15 or 20 years old. The seedling trees, however, do not bear any substantial crop till they are 10 years old and reach their prime only after about 30 years. Mango trees have been known to live and yield fruit for over hundred years but the average life may be taken to be at 60 to 80 years.

The harvesting of fruit starts in the beginning of May and is in full swing by the end of the month and the crop of the main commercial variety viz., the *Alphonso* is almost over by the middle of June, though the harvesting of the late varieties may extend upto the middle of July. Most of the crop produced in the district is sold in the Bombay market, though a substantial portion also finds its way to North Gujarat and Saurashtra markets.

Kela

Kela (Banana).—Apart from its commercial importance, banana enjoys popularity as one of the most auspicious plants in the country. Banana is essentially a tropical plant and grown

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best in warm humid climate. It requires deep and rich soil with high organic matter and adequate provision for drainange. The climate of that portion of the district which contains a maximum area of this crop is not so humid and is characterized by low rainfall. It is because of this that none of the tall varieties of bannanas are commercially cultivated in the district. It is only the dwarf variety of banana. viz., the *Basrai* that is grown around the banks of the Tapi river where adequate facilities for irrigation are available. The talukas of Chorasi, Bardoli and Palsana, situated along the river, are the principal banana growing acres of the district and account for over 4,600 acres out of an approximate area of 7,000 acres in the district. The talukas of Navsari, Gandevi and Kamrej are the other important banana growing areas and account for another 1,500 acres under this fruit, thus leaving a balance of less than a thousand acres in the remaining 12 talukas.

The edible bananas do not produce any seed and the propagation has to be done only by vegetative means. The plant can bear fruit once only and after a plant has once borne fruit, it has to be cut down. The plant, however, produces a number of suckers on the sides of the parent corm and these can be detached and used as further planting material. The plant flowers 10 to 14 months after planting and the crop is ready for havesting 12 to 13 months after planting. After the crop has been harvested, either the suckers can be allowed to grow and produce another crop in course of time or they are dug out and planted on a new site. In this district, the second *ratoon* crop is rarely taken but as soon as the crop is over, the suckers are dug out and planted elsewhere.

Planting is mostly done in the months of April to July and the plants are spaced 4½ to 6 feet each way. In case of early planted fields, usually an inter-crop of *suran* is taken which is taken out by September, October when the banana plant requires more space. Before planting, a heavy dose of farm yard manure or compost is evenly spread over the whole field and subsequently top dressing in the form of cake or inorganic nitrogenous manures is applied in two or three doses after the second month. Normally two to three lbs. of cake is applied to each plant as a top-dressing. Bananas are regularly irrigated at an interval of five to ten days depending on the season. The average yield of fruit is about 30,000 lbs. per acre, but in case of a well maintained plantation a yield of 60,000 lbs. per acre is not uncommon.

The fruit is mainly sent to the Bombay market, though some is also sent to North Gujarat, Saurashtra and North Indian markets. The marketing is usually done through co-operative societies of the growers and there are a number of such well organized societies looking after the marketing of bananas.

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Chiku

Chiku, the sapodilla:—This fruit, which originated in the tropical region of South America, has found a good home in Thana and Surat districts of Bombay State where it is cultivated on a commercial scale. The fruit which varies in shape from round to eleptical is mostly exported to Bombay market for sale. It is mostly concentrated in Gandevi, Bulsar, and Pardi talukas. The *chiku* tree yields a white latex from which the basic material for the manufacture of chewing-gum is obtained. In the district as well as in other parts of the country where *chiku* tree is grown, it is used as a source of fruit only and latex is not exploited.

The fruit being a native of humid tropics does best in the southern part of the district along the sea coast where temperature remains rather high during the whole year and humidity too is rather high. It does well on deep, well-drained soils and as such is grown on medium black soils. The trees are seldom propagated by seed. The propagation by enarching the plants on to *rayan* root stock or by air-layering is almost exclusively practised. The planting is usually done either just before the rains or in September,-October after heavy rains are over, and the plants are usually spaced 30 feet apart. Manure is usually applied twice in a year, once in the months of September-October and and again in March. The trees are usually irrigated after the end of monsoon.

Chiku trees commence to bear fruit after three years of planting and the yield continues to increase till the trees are about 30 years old. The average life of a *chiku* tree is considered to be 60 to 70 years. Flowers appear on the tree almost throughout the year, though it is most profuse during the rainy season. The fruit take about six months to be ready and the maximum crop is obtained from November to April, though fruit is available almost throughout the year. An average full grown tree yields about 2,000 fruits per year. Inter-crops are usually taken in the young orchards.

VEGETABLES

Surat district is quite famous for the cultivation of vegetables. These vegetables cover an area of 8,828 acres of land in the district, chief among thenm being brinjals, *suran*, onions, tomatoes, *bhinda*, cabbage and winter vegetables. The following table shows the area under various vegetables in Surat district :—

TABLE No. 23

STATEMENT SHOWING AREA IN ACRES UNDER VEGETABLES IN SURAT DISTRICT (1953-54).

	Sweet Potatoes.	Onions	Yams	Suran	Carrots	Radish	Cabbage	Brinjals	Tomatoes	Fenugreek	Bhinda	Melon	Winter Vegetables	Summer Vegetables	Total Vegetables
Bansda ...	—	11	—	18	—	—	—	11	2	—	—	—	2	—	44
Bardoli ...	7	160	12	76	—	—	22	98	17	—	31	3	22	5	453
Bulsar ...	2	65	17	48	—	—	—	123	60	1	2	—	—	—	318
Chikhali ...	—	90	8	268	—	—	—	85	14	—	—	—	5	—	470
Chorasi ...	—	33	36	191	3	21	180	841	325	—	239	—	1,003	201	3,073
Dharampur ...	—	—	—	1	—	—	—	20	5	—	—	—	—	—	26
Gandevi ...	27	112	—	306	—	1	3	—	77	—	—	—	327	—	857
Kamrej ...	1	70	1	10	—	—	—	150	92	—	4	—	24	124	496
Mahuwa ...	2	23	20	21	—	—	—	43	3	—	24	—	18	—	137
Mandvi ...	—	57	4	6	—	—	2	95	13	—	7	2	121	—	379
Mangrol ...	—	—	—	—	—	—	—	72	—	—	79	—	115	—	275
Navsari ...	18	217	3	118	—	2	96	214	90	—	88	—	75	—	860
Olpad ...	—	—	—	—	—	—	—	—	40	—	27	—	—	537	672
Palsana ...	2	37	23	58	—	—	1	77	13	—	95	—	39	34	285
Pardi ...	3	—	2	—	—	—	—	138	48	—	1	—	7	—	198
Songadh ...	—	1	—	—	—	—	—	48	14	—	—	—	—	—	63
Valod ...	—	44	4	6	1	—	—	78	3	—	22	—	2	1	101
Vyara ...	—	16	2	2	—	1	2	74	6	—	16	—	2	—	102
Total ...	62	936	132	1,129	4	25	306	2,107	822	1	635	5	1,762	902	8,828

It is evident from the above table that most of vegetables are grown in the Chorashi taluka, mainly because of its proximity to Surat town. Lands in this taluka consist of light black soils and are well drained and these two factors favour the cultivation of vegetables. In Chorasi taluka, there are a few villages, which are noted for vegetable cultivation and they are Poona-Kumbharia, Saroli, Mota Varachha, Bhatha Bhatpur, Katargam etc. There are a large number of oil engines fitted on wells in these villages and cultivators grow mainly vegetables in their lands throughout the year. They sell the products in Surat city or export them to Bombay and Ahmedabed.

Bhinda

Bhinda, (Ladies finger) is grown in the district throughout the year in the well-manured fields. It is grown on 635 acres of land, chief areas of its cultivation being the talukas of Chorashi, Olpad, Mangrol, and Mandvi. The crop gets ready within three months of planting. The green pods are eaten as vegetables.

Dudhi

Dudhi, the long white gourd, is a creeping plant and is grown in garden lands either alone or mixed with *suran* crop. It is sown in the month of May or September and begins to bear fruit in about three months. It is used as a vegetable and is also used in preparing sweetmeat called *Halva*, and is highly relished.

Dungli or Kanda

Dungli or *Kanda*, (onion) covers an area of 936 acres and is mainly grown in Navsari and Bardoli. It is a *rabi* crop. Seedlings are first raised in seed beds and they are transplanted to fields when they are one month old. Pods of onions mature in four months. Lands are irrigated once in ten days. There are two varieties of onions grown in the district namely the red and white. Onions are eaten, both as a salad as well as a vegetable, by almost all classes of people except some very orthodox sections.

Kobij

Kobij, (cabbage), is grown on 306 acres of land chiefly in the talukas of Chorasi and Navsari It is grown in the *rabi* seasons and sowing is by the transplantation method. The fields are manured at the rate of 15 to 20 cart loads of farm yard manure per acre. The crop is watered at intervals of 10 to 12 days. The crop comes to maturity after about three months. The cabbage leaves are fed to cattle and the heads are used as a vegetable.

Parvar

Parwar is a small green fruit of a creeper plant, planted in the month of May and June. The creepers are allowed to climb the pandals specially erected for them. The fields are given 20 cart loads of farm yard manure per acre and are irrigated. The *parwar* fruit is small and round or oval in shape. It is highly valued as a nutritious vegetable.

Shakaria

Shakaria, (Sweet potato) is grown on a very small area. It is grown from cuttings with three nodes planted anytime in the rainy or the cold season. Ordinarily, it is manured and also irrigated. It takes about six months to mature. The

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VEGETABLES

Sura

roots are eaten either boiled or roasted ; and sometimes as a vegetable.

Suran, Elephant's foot, is grown in 1,129 acres, mainly in n the talukas of Gandevi, Chikhali, Chorashi and Navsari. The corms of *suran* are allowed to sprout a little and then planted in the fields, not very deep, in any season of the year. It takes nearly three years for the root to develop to its maximum size. The corm is used as a vetgetable. It can be stored and used whenever required. The Surat variety, is quite famous and it is grown mostly throughout the State.

Tomato.

Tomato is a fruit vegetable of considerable popularity these days. It covers about 822 acres, chiefly in Chorashi, Kamrej and Navasari. This crop requires heavy manuring and irrigation. It is grown throughout the year. Seeds are first sown in nursery beds and seedlings transplanted in about 3 to 4 weeks. The crop gets ready in about three months. Fruits which change colour from green to red are harvested. Harvesting goes on for about two months. Tomato is used both as a vegetable and as raw salad.

Vengan.

Vengan, (brinjal), is the most extensively cultivated vegetable of the district. It covers an area of 2,107 acres, of which large portions are to be found in Chorashi, Navsari, Kamrej, Bulsar and Pardi. It is grown thoughout the year i.e., in all seasons. Seedlings are first raised in seed beds and are transplanted in the fields after about a month. Farm yard manure is applied to fields at the rate of 10 to 15 cart loads per acre. The crop is usually irrigated except in monsoon. There are about seven vareities of brinjals grown in the district. Some of them are small and round, some long and thin and some are long and fleshy. The small round variety which is grown in monsoon without irrigation is much liked by the public.

Besides these vegetables, Surat district grows a variety of summer and winter vegetables but the area covered by each of them is small and the products of those crops are chiefly consumed in the locality itself.

AGRICULTURAL OPERATIONS.

In Surat district, agricultural operations vary from place to place according to crops and soils. These operations include ploughing, harrowing, spreading the manure, sowing the seed or planting the sets or seedlings, weeding, interculturing, earthing up, irrigating, top-dressing, spreading or dusting of insecticides, watching to protect the crops from birds, cattle and wild animals, harvesting, threshing and preparing the crop for the market and storing. In addition to these, occasional operations for the improvement of lands such as bunding, levelling, draining excess water from the soil and reclaiming the soils for cultivation are also undertaken by farmers.

Ploughing.

Ploughing is done with a view to opening the lands in almost all the fields except those intended for the cultivation of cotton

AGRICULTURAL OPERATIONS.

and jowar. The soil in this district is so hard that it cannot be ploughed during summer; hence *kyari* and garden lands are ploughed, usually with wooden ploughs. Almost every cultivator keeps a wooden plough which costs nearly Rs. 40. Some of the well-to-do and progressive cultivators keep iron ploughs instead of wooden ones. A pair of bullocks is required to work either of these two types of ploughs. The wooden ploughs open furrows three to four inches deep whereas the iron ones go as deep sa five to six inches. Of late, some have taken to tractor ploughing with a view to eradicating deep rooted weeds. Such tractor ploughing is done once in ten years only. On an average, a wooden plough opens up half an acre of land in a day. Same is the case with the iron plough, but a tractor generally ploughs seven acres of land in a day. The ploughing charges per acre in the case of wooden as well as iron plough comes to Rs. 18 to 20.

Harrowing

The black cotton soil lands are generally harrowed twice or thrice before monsoon i.e. in the months of May and June. Garden lands are also harrowed after the ploughing operations are over. Harrowing is usually done with a wooden harrow, worked with the help of two bullocks. It goes two to three inches deep and can cover about 2 acres in a day. The wooden harrow is used both in the preparatory tillage and for interculturing of crops like cotton and jowar. The wooden harrow is made up of wood except the blade which is of iron, and costs about Rs. 25. An improved harrow of iron is also prepared by local blacksmiths, particularly in a village called Sayan and thus it is known as *Sayan* harrow. This harrow is particularly used for digging out groundnuts. It costs Rs. 30. The cost of harrowing an acre of land works out at Rs. 8 to 10.

Manuring

Manures are applied to all crops except jowar in this district. An acre of land under *kharif* crops gets a dose of five cart-loads of farm yard manure. Cultivators usually prepare farm yard manure on their own farms. They take out the manure from pits and cart the same to their fields in May and June i.e. before the commencement of the monsoon. The manure is kept in small heaps and then spread in the field by a hand implement locally known as *panjeti* (rake). The cart load contains about half a ton of farm yard manure and one man can easily spread five cart loads of manure in a day. After spreading the manure, one harrowing is done in the fields which usually helps in mixing the manure in the soil. In one day, two to three acres can be harrowed in this manner.

Sowing.

In most of the crops, seeds are sown with the help of seed drills for starting the crop. But in case of some crops such as paddy, *nagli*, and some vegetables like brinjals, cabbage, and tomatoes, seedlings are first raised in special seed beds and then transplanted to fields when they are three weeks old. Some advanced cotton growers sow cotton seeds by dibbling them with

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AGRICULTURAL OPERATIONS.

Sowing

hands. The seed drill is drawn by a pair of bullocks and two men-one for drawing the bullocks and the other for sowing the seed. A seed drill worked by two men and a pair of bullocks can sow from two to four acres of land in a day according to the season *rabi* or *kharif*. The seed after drilling is covered by running a light plank over the lands. The quantity of seed required per acre varies from crop to crop according to its size and weight and also the optimum number of plants per acre to get the best crop.

Sowing operations in Surat district coincide roughly with the out break of the monsoon. The following statement shows the sowing periods of some of the important crops in the district:-

TABLE NO. 24

SHOWING PERIODS OF SOME OF THE IMPORTANT CROPS IN SURAT DISTRICT

Months	Crops
January	Sugarcane.
June	Cotton, Paddy, Bajri *Ragi*, Groundnut, *Tur* and *Adad*.
July	Cotton, Paddy, Bajri, Ragi, Groundnut, *Tur* and *Udid*.
August	Jowar and Tobacco.
September	Jowar and Tobacco,
October	Wheat, Gram and *Val*.
November	Wheat, Gram and *Val*.

Inter-culturing.

Inter-culturing means culturing, tilling or stirring the soil in between the lines of a crop. This is done by implements known as "Karbadi" (hoe) and *Karab* (harrow). Inter-culturing is done to remove the weeds that take away large quantities of moisture and plant food, to aerate the soil, to prepare a mulch (a loose layer of dry soil as covering), to conserve soil moisture useful for the crop, to prune the roots so as to encourage a deep root system and to kill the harmful insects hibernating in the soil. *Kharif* crops require two to three inter-culturings. Generally, two to four acres of land can be inter-cultured in a day. The cost of inter-culturing an acre comes to about Rs. 10.

Weeding.

The weeds that are in line with the crop escape the *karabadi* and *karab*, and thus are required to be removed by hand with

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the help of a weeding hook locally known as *khurpi*. Four to six women labourers are required to weed an acre, depending on the kind and extent of the weed growth. Two to three weedings are done for most of the crops. A woman labourer is usually given annas twelve per day as wages for the work.

Earthing up.

The next important operation is earthing up, i.e. digging the soil from near about the plant and heaping it up at the base of the plant. This is done in order to give support to the plant, to prevent lodging and to keep the tubers and roots under the soil. Earthing up is required in the case of crops like sugarcane, tubers like *suran* and *ginger*, bananas, vegetables and fruit trees. This is done mostly by hand digging with a pick axe (*kaudali*) and bringing the soil near the base of the plant by a *pawda*. For crops that are sown in lines, an iron ridger is also used for earthing up purposes.

Top dressing.

Top dressing i.e., applying quick-acting manures on the surface of the soil and then mixing them with the soil, is done by stirring the soil either by hand or by hoes. Ammonium sulphate, super phosphate, bone-meal, manure mixtures and oil-cakes are generally used for top dressing. Doses of these manures differ with different crops.

Irrigation

Irrigation is done from canals, wells and tanks. It is available mostly by gravitational flow from the canals and tanks, while in the case of wells water is lifted by *kos* (leather bag), *ret* (persian wheel) and pumps. In case of canals and tanks, two men or women are required to control and apply water to an acre of land in a day. In the case of water lifted from wells, in addition to the men required for controlling and applying the water, another man is required to operate the water lifts (*kos*).The quantity of water and the frequency of irrigation depend upon the crops, soils and the seasons. In Surat district, the intervals between two waterings vary from 8 to 15 days and the quantity of water supplied to the fields per irrigation varies from three acre inches to four acre inches. An acre inch roughly measures 3,630 cubic feet or 101 tons of water approximately.

Crop Protection.

The farmer has to provide for some protective and curative measures as well. He has to take precautionary measures to avoid certain pests and diseases. It has been found customary in the district to treat jowar seeds by mixing them with sulphur for control of the smut disease of jowar known as *anjio* or *anjario*. Whenever any inseets or diseases appear in a crop, the farmers either spray or dust the special insecticides or fungicides recommended for that crop by the Department of Agriculture. The standing grain crops have to be watched during the season lest birds and other animals eat away the grain. Young girls are generally employed for this purpose.

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They shout and throw stones by slings (*gophan*) to scare away the birds. Stray cattle are generally caught and impounded in the cattle pound. Wherever possible, farmers have wire fencing round their fields for protecting garden crops and live fencing for protecting their other crops.

Harvesting.

One of the most important agricultural operations, next only to ploughing and sowing, is the mopping or harvesting of the standing crops. The process is commonly known as *kapani*. The crops are harvested only when they are fully ripe. The period of ripening varies from crop to crop. The following statement gives the harvesting times for some of the important crops of the district :—

Harvesting time of some of the important crops in the Surat district.

Months		Crops
1. January	...	Kharif Jowar and Sugarcane.
2. Febryary	...	Wheat, Gram, Tur and Cotton.
3. March	...	Rabi jowar, Wheat, and Cotton.
4. October	...	Bajri, Paddy, Ragi and Adad.
5. November	...	Paddy, Ragy, Adad and Groundnut.
6. December	...	Groundnut and Sugarcane.

Food grain crops such bajri, rice, wheat and gram are harvested by cutting the plants close to the ground by a sickle. The cut plants are then put into small heaps and the earheads are removed by cutting or breaking in the threshing yard commonly known as *khali* The stems or stalks are dried, bundled and stocked as fodder.

Pulses are mostly cut as whole plants and are removed directly to the threshing floor. Vegetables are picked by hand and the leafy ones are uprooted. Root crops like potatoes, sweet potataes, ginger and turmeric are harvested by digging with a spade (*kodali*). Cotton is usually picked by hand.

Threshing and preparing for the market.

Grain crops such as jowar and pulses are trampled under bullock's feet till the material is broken completely into chaff. The grain is separated from the chaff by winnowing against the breeze.

Some of the root vegetables are dug out, cleaned well by rubbing out the soil after drying or washing, and sold in the market. Some crops like ginger and turmeric are dried and specially cured. Cotton is directly taken to ginneries for getting it ginned and pressed into bales.

AGRICULTURAL OPERATION

Storing.

Grains are stored either for purposes of seed or for consumption at a later date. When they are meant for purposes of seed, they are preserved ir. cylindrical bins made up of iron or bamboos. The bamboo bills are well plastered with mud and cow-dung. Pulses are sometimes mixed with fine sand and then stored in the bins. Dry leaves of *neem* trees are mixed with seed in storage. For a long starage, caster oil is also applied to the seeds. All seeds are thoroughly dried up before storing. Grains required for future consumption are also stored in underground pits or in cellars in residential buildings. Before storing, however, the grain is thoroughly dried.

AGRICULTURAL IMPLEMENTS.

The main agricultural implements used in Surat district are as follows :—

1. Ploughs.
2. Harrows.
3. Seed drills.
4. Water lifts.
5. Hoes.

6. Miscellaneous tools like axe, pick-axe, spade, weeding hook, crowbar, rake and sickle.

Ploughs.

Ploughs generally used in the district are of indigenous type and are made up of *babul* wood. A wooden plough, the *hal*, costs Rs. 30 to Rs. 40. It consists of the following parts : the beam (*hal*), yoke (*jusri*), share (*kose*) and the body. All parts of the plough are made of wood except the share which is made of iron. The plough, which is drawn by two bullocks, opens triangular furrows nearly three inches deep. This type of plough is generally used for tilling lands intended for garden crops and is also used for puddling rice fields. Recently, iron ploughs have also been introduced. They are worked by a pair of bullocks and generally go four to five inches deep. Wooden ploughs are prepared by the local carpenters who also undertake repairs. Iron ploughs are manufactured in factories and repairs to them are attended by a few workshops situated in the towns and cities of the district. The spare parts of iron ploughs are sold by agents of the manufacturers who have their shops in the district towns.

Recently, tractor ploughing has made its appearance in the district and about 50 cultivators own tractors, ranging between 25 and 45 horse power. These tractors are equipped with ploughs, disc-harrows, cultivators and clod-crushers. They are used for ploughing, harrowing, inter-culturing and clod-crushing ; and sometimes used for lifting water from wells. They are of two-types—namely the chain type and the wheel type. The price of tractors varies from Rs. 8,000 to Rs. 20,000 according to the horse power and the type of the tractor. The owners of these machines are usually big landlords who after completing their own work,

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hire out the same to the other cultivators. They usually charge Rs. 25 to Rs. 30 per acre for ploughing.

The Department of Agriculture also maintains a fleet of tractors and undertakes the work of ploughing at the rate of Rs. 30 per acre.

Harrow

Harrows (*karab*) are prepared locally in almost all the villages of the district. The local harrow consists of the following parts : (1) head piece (*lodhio*), (2) prongs (*danta*), (3) blade (*pas*) and (4) beam (*hal*). Except the blade which is made of iron, all parts of the local harrow are made of *babul* wood. The harrow is drawn by a pair of bullocks and is used for harrowing fields as well as for inter culturing fields under cotton and jowar. It is also used for digging out groundnut pods from the soil. A harrow generally weighs 60 to 70 lbs, and works to a depth of about two to three inches. In a day, about two acres can be harrowed. At Sayan, a village in the Olpad taluka, iron harrows are manufactured and they are found quite useful in digging out groundnut pods. These harrows are known as *sayan harrows*.

Seed drill

Seed drill, locally known as *faduka*, is used for sowing seeds of various crops. It is made of *babul* wood and is manufactured locally in every village by local carpenters. Generally, there are two coulters in a seed drill, attached to the headpiece. There is a hole in the coulter to fix a bamboo or hollow iron tube for allowing the seed to pass through into the soil. Both the tubes from the coulters are kept together fixed in a bowl. The seed to be sown is evenly distributed in both the tubes through the seed bowl. The seed bowl and the tubes are tied to the centre of the head piece by a string. This kind of seed drill requires one man to drive a pair of bullocks attached to the implement and another man to feed the seed bowl with the seed to be sown. A drill can sow about 3-4 acres a day. A seed drill costs about Rs. 25 to Rs. 30.

Water Lifts.

Kos (water lifts) either of iron or leather are used for lifting water from wells. Leather *kos* are generally manufactured by the village cobblers and iron ones are also prepared by local blacksmiths. Recently, a number of pumps for lifting water worked either by oil engines or electric motors have come into use in this district. These oil engines are usually of foreign make.

For inter-culturing crops like jowar, bajri, and other food grains, hoes are used. This implement is a miniature form of blade harrow. It is also useful in stirring the soil with a view to conserving the soil moisture and to remove the weeds. Hoes can be used only when the crops attain a height of about 15 to 24 inches. The beadth of the hoe blade depends upon the space between the crop lines. Generally, two hoes are worked

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on one yoke and two men with a pair of bullocks can inter-culture about 4 to 5 acres in a day. The Department of Agriculture has introduced an improved type of hoe namely the Baroda hoe. The Baroda hoe is of iron having three iron prongs where three triangular blades can be fixed. The distance between two prongs and the angle of the prongs is adjustable. Cultivators have taken a special fancy for this type of hoe, hence a large number of them have come into use in the district. An effort has been made to prepare the *Bawda* hoes locally. The price of a *Bawda* hoe is about Rs. 20 while that of an indigenous one is Rs. 15.

Other implements

Besides the tools mentioned above, there are a few other implements which are utilised in other agricultural operations and are worked by hand. These are as follows : (1) axe (*kuhadi*), (2) pick-axe (*kudali*), (3) spade (*pawda*), (4) weeding hook (*khurpi*), (5) crowbar (*kos*) and (6) rake (*dantari*). These are all manufactured by the local village carpenters and blacksmiths. Sugarcane is usually crushed in the iron crushers. Sugarcane juice is boiled in iron pans locally manufactured. The pan is shallow and broad, about 7 feet in diameter and 10 inches deep with a capacity of 1000 to 1200 lbs. of juice. The moulds for preparing the gur blocks are made of galvanised iron sheets.

Bullock cart.

The bullock cart, known in Gujarat as *gada*, is the most common means of transport in the rural areas of the district. The cart is driven by two bullocks, and its price varies from Rs. 300 to Rs. 400.

The following figures show agricultural implements in Surat district in the year 1953-54 :—

1.	Ploughs—	
	(*a*) Wooden	1,40,124
	(*b*) Iron	2,348
2.	Bullock carts	1,64,915
3.	Sugarcane crushers	918
4.	Tractors	49
5.	Oil engines	3,141
6.	Electric pumps	65
7.	Ghanies	321

LIVESTOCK.

Live-stock form an important item in a farm. A farmer usually keeps a pair of bullocks and a few cows, and in addition, a few sheep, goats and poultry. As yet, not much headway has been made in this district in the use of mechanical implements and hence bullock-driven ploughs, carts, and water lifts are in common use. In fact, in rural areas, a farmer's status and efficiency are judged by the number of cattle that he possesses.

CHAPTER 5. Agriculture and Irrigation. LIVESTOCK.

The 1956 census of the district shows as follows the number and category of the livestorck in the district :—

TABLE No. 25

LIVESTOCK IN SURAT, 1956

Classification of Cattle	Cow class	Buffalo class
(1) Working bullocks over 3 years kept for work only	2,58,030	12,308
(2) Bulls & Bullocks over 3 years not used for breading or work	4,753	377
(3) Breeding cows over 3 years kept for breeding and milk production	1,60,682	1,05,482
(4) Cows over 3 years used for work only ...	1,256	734
(5) Cows over three years not in use for work or breeding purposes	508	233
(6) *Young stock*		
(*a*) *Under 1 year*		
(i) Male	30,934	10,947
(ii) Female	28,965	23,452
(*b*) 1 *to* 3 *years*		
(i) Male	59,225	6,489
(ii) Female	56,542	31,311
(7) Breeding bulls over 3 years kept for breed ng purposes only	592	538
TOTAL	6,01,487	19,18,71

In addition to these cattle Surat district in 1956 had 28,410 sheep, 2,10,562 goats, 3,724 horses and ponies, 1352 donkeys, 131 pigs, 5 mules and 7,61,416 poultry. These animals, though not exactly used on the farm, are useful to the farmer in a number of other ways and can be classed as agricultural livestock.

These figures, as compared to those given in the old Gazetteer, reveal that there has been a tremendous increase in the livestock population of the district during the last seventy years.

Cows and Buffaloes.

In Surat district, bullocks and he-buffaloes are used for agricultural work on the farm. Cows and she-buffaloes are mainly kept for milk production and breeding purposes. Cows and bullocks are mainly of the *kankrej* type throughout the district, except in the eastern hilly tracts where they are of either the *Dangi* type or the local non-descript ones. Buffaloes are

mainly kept for milk production and belong to the local *surati* type. The total production of milk in the district has been estimated at 12,00,000 maunds per year. The cattele provide rich farm yard manure and about 16 lakhs cart-loads of manure, valued at Rs. 56 lakhs, are annually collected.

The following statement shows the price of the above mentioned types of cattle :

Cow	Kankrej	—	Rs. 250 to Rs. 300
	Dangi	—	Rs. 30 to Rs. 40
Buffaloes	Surati	—	Rs. 300 to Rs. 500
Bullocks	Kankrej	—	Rs. 300 to Rs. 500
	Dangi	—	Rs. 30 to Rs. 40
Cow Bull	Kankrej	—	Rs. 250 to Rs. 300
	Dangi	—	Rs. 30 to Rs. 40
He-Buffalo	Surati	—	Rs.150 to Rs. 200

Generally, cultivators rear their own cattle. Cows and bullocks of the *kankrej* breed are sometimes imported from Ahmedabad and Meshana districts.

Sheep.

This district has a small sheep population i. e. 28,410. Many of them belong to the migrating shepherds who move down wards from the northern descript in search of grazing and water during winter and summer months. Sheep in this district belong to the local non-descript types. There has been no demand for the supply of better type of sheep, hence no sheep improvement scheme has been launched in this district.

Goats.

Surat is an importrant district from the point of view of goat population which has been estimated at 2,10,562. In fact the *Surati* breed of goats is well known. This breed is the outcome of a cross between the local goats and the Arabian type. The *Surati* goats are good milk suppliers. No particular goat improvement scheme has been launched in the district.

These animals are valuable assets as they produce wool, hair, skins, and mutton and, in the case of goats, also milk. It has been the usual practice of farmers of this district to keep a few sheep and goats on the farm along with other cattle. Goats and sheep for mutton cost between Rs. 20 and Rs. 30 each.

The following statement shows the production of wool, mutton, hides etc. in Surat district :—

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LIVESTOCK.

	Sheep	Goats
1. Wool (lbs.)	18,237	—
2. Manure (tons)	5,471	43,442
3. Mutton (lbs).	2,18,844	38,61,520
4. Hides (No.)	9,726	1,06,192
5. Young stock (No.)	8,607	1,17,900

Horses etc.

Horses, asses etc. though not used for agricultural operations, can be classed as agricultural livestock. These animals are mostly used for drawing transport vehicles and sometimes as pack animals.

Veterinary facilities.

In Surat district, there are in all 19 veerinary hospitals and those are located at the following places :—

1. Surat. 2. Bardoli. 3. Chikhali. 4. Eru. 5. Olpad. 6. Pardi. 7. Mandvi. 8. Valod. 9. Navsari. 10. Vyara. 11. Gandevi. 12. Palsana. 13. Mahuwa. 14. Mangrol. 15. Bulsar. 16. Songadh. 17. Oviana. 18. Bansda. 19. Dharampur.

Almost every taluka of the district has a veterinary hospital and livestock from all over the district are brought to these hospitals for medical treatment.

Breeding and Animal Husbandry facilities.

Some efforts have been made in this district to grade up the cattle. At the dairy farm at Kankrej, which is under the administrative control of the Institute of Agriculture, Anand, 10 to 15 pedigree breeding bulls are maintained and are given to the cultivators for breeding purposes. An artificial insemination centre and key village scheme have been launched in the district since June 1953. The work is, however, restricted to some 12 villages of Bardoli and Valod talukas. The semen of he-buffaloes of the *Surati* variety and the *kankrej* cow bull is collected at the centre and used for artificial insemination for buffaloes and cows of these 12 villages. Every year about 300 cattle are artificially inseminated.

The Department of Agriculture also gives out premium *kankrej* bulls to the cultivators of the district for improving the pedigree of their cattle. The Department also gives a maintenance charge of Rs. 12 per month to them for maintenance of the premium bull for the first three years. At present, 81 such premium bulls are located at different villages in the district.

IRRIGATION

An area Irrigation of 27,938 acres i. e. 1.5 per cent of the district's gross cropped area is under irrigated farming. The following statement shows the area under irrigation in the different talukas of the district :—

TABLE No. 26

AREA IN ACRES UNDER IRRIGATION IN SURAT DISTRICT (1953-54).

Talukas	Area under Irrigation
Bansda ...	138
Bardoli ...	1,993
Bulsar ...	779
Chikhali	1,115
Chorasi	2,283
Dharampur	164
Gandevi	2,418
Kamrej	5,806
Mahuwa	619
Mandvi	488
Mangrol	366
Navsari	5,500
Olpad ...	—
Palsana	2,040
Pardi ...	3,117
Songadh	14
Valod ...	322
Vyara ...	776
Surat district ...	27,938

The following statement shows the crops and irrigated area under them in Surat district for 1953-54:—

TABLE No. 27

DISTRIBUTION OF IRRIGATED AREA BY CROPS IN SURAT DISTRICT (1953-54).

Crops.	Area under Irrigation
Rice	10,069
Wheat	3,057
Kharif Jowar	504
Sugarcane	2,497
Other food—	
Crops	8,497
Cotton	1,465
Tobacco	183
Chillies	411
Ginger	51
Turmeric	50
Fodder Crops	642
Other non-food crops...	512
	27,938

The crops of the district that are irrigated are rice, wheat, *kharif* jowar, sugercane, cotton, tobacco, chillies, ginger, turmeric and some other crops. But rice alone accounts for 10,069 acres i. e. 36.0 per cent of the total area under irrigated farming.

The total net area under irrigation in 1953-54 has been estimated at 27,843 acres and the distribution of this area by different sources of irrigation is as follows :—

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TABLE No. 28

STATEMENT SHOWING AREA IN ACRES UNDER IRRIGATION BY SOURCES (1953-54).

	Government Canals	Tanks	Wells	Other Sources	Total
Bansda	—	45	64	29	138
Bardoli	202	—	1,791	—	1,993
Bulsar	—	—	779	—	779
Chikhali	—	23	1,092	—	1,115
Chorasi	—	57	2,226	—	2,283
Dharampur	—	9	140	15	164
Gandevi	289	256	1,873	—	2,418
Kamrej	—	—	5,725	81	5,806
Mahuwa	108	55	366	90	619
Mandvi	—	—	473	15	488
Mangrol	—	—	282	84	366
Navsari	—	801	4,699	—	5,500
Olpad	—	—	—	—	—
Palsana	—	—	1,403	637	2,040
Pardi	—	2,400	717	—	3,117
Songadh	—	—	14	—	14
Valod	—	—	322	—	322
Vyara	583	—	193	—	776
Total ...	1,182	3,646	22,159	951	27,938

Well irrigation seems to be the most predominent form of irrigation, irrigating as they do about 79%of the total area cultivated.

The following are the sources of irrigation in Surat district:—

(1) Wells ... ... 12,613.
(2) Tanks ... ... 2,038.
(3) Canals ... ... 2.
(4) Lift Irrigation schemes—
 (1) Government ... 4.
 (2) Co-operative ... 22.

There has been some increase in the number of wells since the compilation of the old Gazetteer. While their number in 1873-74 was 10,152, in 1953-54 it was 12,613. The distribution of wells is as follows :—

WELLS IN SURAT DISTRICT (1953-54).

Taluka	Masonry	Non-Masonry	Total
1. Bansda	19	—	19
2 Bardoli	826	35	861
3. Bulsar	661	—	661
4. Chikhali	2,771	80	2,851
5. Chorasi	655	12	667
6. Dharampur	15	—	15
7. Gandevi	1,668	7	1,675
8. Kamrej	476	16	492
9. Mahuwa	42	5	47
10. Mandvi	88	70	158
11. Mangrol	680	55	735
12. Navsari	430	1,575	2,005
13. Olpad	160	1	161
14. Palsana	437	12	449
15. Pardi	809	—	809
16. Songadh	18	44	62
17. Valod	322	—	322
18. Vyara	624	—	624
Total ...	10,701	1,912	12,316

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Masonry wells, numbering 10,701, are *pucca* wells constructed with brick and mortar whereas the non-masonry wells, numbering 1,912, are simple holes from 10 to 25 feet deep, and about 3 feet in diameter, dug in alluvial soil, without brick work or masonry. An average brick built well is about 30 feet deep and faced with mortar only or the water side, and with a cement platform and trough. Water from wells is lifted with the help of *kos* (leather bag), persian wheels (*ret*) and pumps worked by oil engines and sometimes by electricity. The *kos* is worked by two men and a pair of bullocks.

On an average a well worked with *kos* and a pair of bullocks can irrigate about six acres and those fitted with oil engines can irrigate nearly 20 acres in a day. Well irrigation is resorted to when rainfall is deficient and not enough for the *kharif* crops.

Tanks.

There are 2,038 tanks in Surat district and together they command an irrigable area of 21,050 acres. The following statement shows the distribution of tanks among the talukas :—

TANKS IN SURAT DISTRICT

Taluka	Number
(1) Bansda ...	15
(2) Bardoli ...	40
(3) Bulsar ...	129
(3) Chikhali ...	121
(5) Chorsi ...	250
(6) Dharampur ...	6
(7) Gandevi ...	289
(8) Kamrej ...	146
(9) Mahuwa...	22
(10) Mandvi ...	50
(11) Mangrol ...	48
(12) Navsari ...	485
(13) Olpad ...	327
(14) Palsana ...	—
(15) Pardi ...	106
(16) Songadh ...	1
(17) Valod ...	2
(18) Vyara ...	1
Total ...	2,038

In case of tanks, water is available mostly by gravitational flow through distributory channels.

Government Irrigation Works.

It was in the latter half of the year 1946 that the Government of Bombay requested the Central Water Irrigation and Navigation Commission to devise ways and methods to check the floods in the river tapi, and to utilise the water for irrigation and also for the generation of Hydro-electric energy. In 1947, it was decided to put a bund (dam) across the river at Kakarapar, nearly 48 miles from Surat proper, and considerable work was completed by June 1953.

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Kakrapar Project.

The Kakrapar project comprises a masonry pick up weir across the river Tapi and a system of canals on both the banks of the river, commanding a gross area of appoximately 8,00,000 acres in Surat district.

Location.

The weir site is located opposite the Kakrapar village, on a rocky barrier, appoximately 48 miles up stream of the Hope Bridge at Surat. The nearest station is Madhi (on the Tapi-valley section of the Western Railway) to which it is connected by a fourteen mile all-weather road.

The weir is 2,039 feet long with a maximum height of 45 feet above the deepest river bed and is designed to pass maximun flood discharge of 13,50,000 cusecs with 48 feet of water over the crest.

The canal regulators are fifty feet high imposing structures also built in masonry and each regulater has three spans of 20 feet controlled by vertical gates. Earthen affux bunds have been provided on both the banks in continuation with the canal regulators.

Canal System.

The left bank canal has a designed discharge of 3,000 cusecs at the head. The head reach of this canal, which passes through deep rock cutting in a length of 4500 feet, is flumed and lined. The right bank main canal has a discharge of 1,000 cusecs at the head. Both these canals cross a number of rivers and *nallahs*, small and big, necessitating the construction of numerous aqueducts drainage syphons, and canal syphons. The aqueduct over the Purna river will be the largest of all having five spans of 120 feet each, the channel flume rising 72 feet above the river bed. A number of branches, distributaries and mines take off from the main canals and the total length of all these channels comes to over 800 miles and involves an earth a work of 68 crores of cubic feet.

The commanded area of about 8,00,000 acres is almost fully occupied and is under cultivation but at present only *kharif* crops are raised. In the absence of winter rains, *rabi* crops are not grown. With the advent of irrigation from the project, *kharif* crops will receive assured water supply and crops like wheat can be grown in the rabi season. *Desi* Cotton is an important crop of this area but the crop remains without water from October to March and yields only 350 lbs. of cotton per acre. With irrigation from this project, it would be possible to grow better varieties with more than double the yield and feittching better prices. With the completion of the project and the canals, irrigation may be available for the following acreage under different crops in the district :—

KAKARAPAR DAM (Full-view)



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Rice	...	1,53,450 acres
Cotton	...	1,07,175 „
Jowar (*Kharif*)	...	56,225 „
Gram and *Val*	...	1,02,300 „
Wheat	...	84,338 „
Jowar (*Rabi*))	...	35,725 „
Green manure crops (*Rabi*)	...	28,112 „
Green manure crops (*kharif*)	...	84,337 „
		6,51,662 acres

The irrigation facilities, after the full development of the Kakarapar project, are expected to produce annually an additional quantity of 1,60,000 tons of foodgrains and 16,000 tons of cotton.

The following talukas of the district will receive the benefits of irrigation-either wholly or partially, from the Kakarapar Project after its completion :—

(1) Surat (2) Chorasi (3) Olpad (4) Mangrol (5) Kamrej (6) Palsana (Mahal) (7) Navsari (8) Mahuva (9) Gandevi (10) Bulsar (11) Chikhali (12) Mandvi (13) Bardoli (14) Valod (mahal).

Water Rates.

Government have fixed the following water rates for irrigation from the Kakrapar Project :

(1) Rice	......	Rs. 5/5/- per acre
(2) *Kharif* Jowar	...	Rs. 5/5/- „ „
(3) Cotton	...	Rs. 13/5/- „ „
(4) *Rabi* Jawar	...	Rs. 8/-/- „ „
(5) Wheat	...	Rs. 8/-/- „ „
(6) Gram and *Val*	...	Rs. 8/-/- „ „

Programme of Construction.

Investigations for the project area were taken up in April 1948 and construction commenced in Novermber 1949. The Chalthan Branch system which forms part of the Surat Branch system, was opened for irrigation in June 1953.

Costs.

The entire project is estimated to cost Rs. 11.01 crores and is expected to yield a net return of 3.83 per cent in the eleventh year and thereafter the net return will increase progressively yielding 6.02 percent in the 20th year.

Doswada Dam and Chikhali Bandhara and Canal System.

Doswada tank is situated about eight miles east of Vyara and is formed by a dam across the Mindhola river, near Doswada village of the Vyara taluka. It is about four miles from Songadh and half a mile from Doswada flag station on the Tapi valley section of the Western Railway. The dam was constructed

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in 1912-13 at an approximate cost of Rs. 2,40,387. The length of the dam is 625 feet and the capacity of the tank has been estimated at 74 millon cubic feet of water.

There is a pick up weir at Chikhali about 5 miles down-stream from Doswada and the water from the Doswada tank is allowed to flow along the Mindhola river upto the weir. Water is then carried from Chikhali *bandhara* through canals for irrigating the lands of the villages Kapura, Musa, Panwadi and Andharwadi of the Vyara taluka. The length of Chikhali *bandhara* is 350 feet. At present about 900 acres of land are irrigated and revenue derived is about Rs. 12,000 per year. Besides, drinking water is supplied to the Vyara municiapl borough.

The Doswada tank was received by the Bombay Government when the old Baroda State was merged with Bombay State. And the State Government has taken up the work of developing this tank for irrigation purposes. The project when complete will irrigate additional one thousand acres.

Bhandarpada bund.

There is another small dam known as the Bhandarpada weir. It is situated in Songadh taluka, about four miles from Doswada. It is a small masonry bund across a small *nalla*. This is a very old structure and its date of construction, costs etc. are unknown. The length of the *bandhara* is 250 feet and its maximum height 18 feet. The capacity of the cannal and area. under command are not known; however 50 acres of land are reported to be under irrigation from this bandhara. Rice and vegetables are the chief crops that are raised under irrigation from this *bandhara*.

Tanks under the control of the Revenue Department.

Besides the above mentioned major irrigation works, the Revenue Department also has under its control a few irrigation tanks in different Talukas of the district; they are as follows :—

Taluka	Number of Tanks	Area actually Irrigated in acres	Crops raised under Irrigation
Olpad	14	500	Paddy
Chikhali	108	981	Paddy+*Val*
Pardi	51	447	" "
Bulsar	67	3,741	" "
Valod	4	63	Paddy
Bardoli	44	974	Paddy

All these tanks are old ones and it has not been possible to know the date and cost of construction etc. They have not been repaired

during the recent past. Their utilisation is restricted to their locality.

IRRIGATION
Lift Irrigation Schemes.

Water for purposes of irrigation is lifted with the help of pumps from the rivers of the district. There are four lift irrigation schemes run by Government and 22 co-operative lift irrigation schemes in the district.

The details of the four Government lift irrigation schemes are as under :—

Location	Name of the River from which the water is lifted	Area in acres under command
1. Kadod	Tapi.	4000
2. Titwa	Mindhola.	2000
3. Manakpore	Ambika.	285
4. Umra	Mindhola.	400

The following statement shows details of the lift irrigation schemes run by co-operative societies:—

Location	Taluka	Area in acres under command
(1) Valod	Valod	15
(2) Kokanwada	„	16
(3) Ambach	„	74
(4) Syadla	„	102
(5) Nansad	„	80
(6) Godsamba	Mandvi	130
(7) Mandvi	„	400
(8) Moritha	„	400
(9) Ruva Bharampore	Bardoli	[illegible]
(10) Rampura	„	[illegible]
(11) Kohij	„	60
(12) Allu	„	70
(13) Jehangirpura	Chorashi	200
(14) Vauz	„	100
(15) Katargam	„	100
(16) Orna	Kamrej	150
(17) Vahvel	„	380
(18) Delod	„	150
(19) Bhagwanpore	Mahuwa	240
(20) Vahvel	„	275
(21) Sitapur	Bansda	200
(22) Undach	Gandevi	30

SEED SUPPLY.

Most of the cultivators keep their own seed for the next year's sowing. Only a few poor cultivators do not keep it and purchase the same from neighbouring cultivators, seed mer-

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SEED SUPPLY.

chants or from Government seed farms. In case of cotton, most of the cultivators have formed co-operatives and most of the societies have their own gins. Seed cotton is brought to their respective gins and cultivators purchase their seed for next year's sowing from their societies. In addition, there are a number of seed merchants who sell seeds of good quality. The grafts of fruit trees are obtained from nurseries in the district.

There are three Governemnt farms at Surat, Vyara and Gandevi. The produce of these farms is generally taken over by the propaganda section of the Department and is distributed amongst cultivators of the district. Pure seeds of cotton and jowar are produced at the Surat farm, while that of paddy at the Vyara farm. The Gandevi farm is for fruits and grafts of good quality fruits are propagated from here.

(1) *Multiplication and distribution of Z-31 Paddy*—The scheme for multiplication and distribution of Z-31 paddy seed has been in operation in this district. The area suitable for this paddy is about five to six thousand acres. The pure seed of this type has been distributed among cultivators as follows :—

	Quantity of seed distributed in in B. Maunds	Area covered in acres
1948-49	4	4
1949-50	39	39
1950-51	6,835	6,835
1951-52	4,167	4,200
1952-53	2,053	2,066

It is seen from the above figures that the entire suitable area was covered by the Z-31 variety in the year 1950-51 and now only 1/10 of the seed requirement i.e., 600 Bangali Maunds are given out by the Department to the cultivators for maintaining the purity of the seed.

(2) *Multiplication and Distribution of the K-68-1 paddy*—This improved type of paddy is evolved from the local *kada* variety. It gives about eight to ten per cent. higher yield than the local variety and matures within 105 days. The cultivators have liked this variety and it is proposed to distribute 600 Bangali Maunds of pure seed of this variety every year in the district. This scheme is run on no loss and no profit basis.

(3) *Multiplication and distribution of the Kenphad Wheat*—The *Kenphad* wheat is rust resistant type and is very suitable

SEED SUPPLY.

for the black soil lands under irrigation. About 4,000 acres of wheat area in this district is under irrigation. In 1953-54, 250 Bengali maunds of *Kenphad* wheat were given out to the cultivators and the same quantity was proposed to be given out in 1954-55. This scheme is also managed on no profit no loss basis.

(4) *Multiplication and distribution of* 17×*CO* 2 *cotton*—This improved variety of cotton has been evolved at the Government Farm, Surat, and is found suitable for cultivation under irrigation. During the *kharif* season of 1953, this variety of cotton was grown in about 12,000 acres of land and it was expected that in 1954 *kharif* season it would cover an area of 50,000 acres in the district. This variety requires one or two irrigations in the month of October. It gives an yield of about 2,000 lbs. of seed cotton per acre and its staple length has been estimated at 1.1." It is a quality cotton, hence fetches higher prices than the local ones. At present, a *khandi* of the *suyog* cotton fetches Rs. 900 while a *khandi* of this new variety obtains Rs. 1,400. This cotton has got a very bright future particularly in the *gorat* soils under irrigation in the district.

(5) *Others*—The Department of Agriculture has been distributing seeds of the following improved varieties of crops in the district namely, B.P. 53 Jowar S-20 castors, N-207 Bajri and some other varieties of paddy.

MANURES.

The common practice in this district is to manure fields with cow dung, dung of sheep and goats, farm refuse and stable litter. The Agriculture Department also distributes some chemical manure mixtures and fertilisers, and have undertaken some schemes to step up the production of manures locally.

Conversion of farm refuse into copmpost manure is a common practice. Most of the cultivators have their own manure pits in the village, Pits are dug and filled up with farm refuse, cow-dung, stable litter etc. and the contents are allowed to decompose. The pits are opend after a year and the farm yard manure thus produced is utilised for manuring the fields. These pits are usually five to seven feet deep. The Agriculture Department has been propagating better methods of manure composting and give a subsidy of Rs. 2 per pit of the size 10'×6'×3' to induce growers to adopt improved methods of compost making. This scheme is in operation in 450 villages of the district since 1948-49.

There is a scheme in operation under which cattle dung lying waste in the Bombay suburban areas is utilised as manure in this district. It has been made possible to obtain such dung with the help of railway authorities in Surat. This manure has been found very useful for manuring vegetables and food crops and is in great demand. About 1,000 wagons of such cattle dung are being imported annually into the district.

MANURES

Scheme for compost making in rural areas.

In 1947-48 a scheme for preparing compost manure was undertaken in 51 selected villages of the district. they included three villages around each of the 12 taluka demonstration centres, and five contiguous villages in each of the three selected talukas. It was proposed to dig 4,590 pits, each of the size 10x6'x3', in those 51 villages. The scheme was found useful and it was extended to the whole of the district in the year 1948-49. In the beginning the subsidy for digging and filling the pit was Rs. 3 per pit: it was subsequently reduced to Rs. 2 per pit. The following statement shows the progress of the scheme of rural compost mak'ng :—

Years		No. of pits dug	No. of pits filled	Quantity of manure distributed in tons	Area covered in acres	Amount of subsidy given in Rs.
1947-48	...	915	138	345	69	—
1948-49	...	4,346	4,197	10,487	2,098	10,265
1949-50	...	16,564	9,794	24,485	4,897	21,713
1950-51	...	4,600	5,173	32,167	6,433	19,658
1951-52	...	N.A.	N.A.	N.A.	N.A.	N.A.
1952-53	...	2,395	3,015	10,094	2,019	4,000

Town refuse is utilised for making compost manure by 12 municipalities of the district. They have adopted the process which has been evolved by the Agriculture Department, and the annual production amouts to 20,000 tons. The Surat and Rander municipalities alone account for about 10,000 tons of manure and the remaining quantity is produced by the other local bodies. Out of the twelve municipalities, the four municipalities of Rander, Surat, Vyara and Bilimora prepare town compost systematically from the town refuse and night soil, while others only convert the night soil into manure. The following table indicates the progress of the scheme:

Year		Quantity of Town compost manure distributed in tons	Area covered in acres
1947-48	...	2,200	440
1948-49	.	3,466	693
1949-50	...	4,237	847
1950-51	...	12,658	2,533
1951-52	...	14,413	2,882
1952-53	...	10,826	2,165

MANURES

In 1950-51, Government sanctioned a scheme for the conversion of night soil in rural areas into manure. The amount of subsidy for the construction of latrines and for the conversion of night soil into manure for each village is limited to 50 per cent of the actual cost, but not exceeding Rs. 2,000 per village in any case. Government have also sanctioned a loan not exceeding Rs. 3,000 per village towards the costs of construction of latrines and for meeting the recurrent expenditure on the maintenance of latrines during the initial two years. The names of the villages in which the scheme has been put into operation are as under.

(1) Kamalchhod ... ...Valod mahal.
(2) Astan ... ...Palasan mahal
(3) Mahuwa ... ...Mahuwa taluka.
(4) Sarbhon ... ...Bardoli taluka.
(5) Orna ... ...Kamrej taluka.

The Agriculture Department arranges for the distribution of groundnut cake, manure mixtures, sulphate of ammonia and superphosphates for the benefit of farmer.

The distribution of groundnut cake for the purpose of manuring food crops was first undertaken in 1943-44 and till 1950 groundnut cake was distributed among farmers at a subsidised rate. The subsidy was stopped in the year 1950. Groundnut cake began to be sold to farmers at controlled rates through the Department. The following table shows the quantity of groundnut cake distributed in the district:

Year	Quantity distributed in tons	Areas covered in acres
1	2	3
1943-44 ...	385	1,925
1944-45 ...	2,002	10,000
1945-46 ...	1,903	9 500
1946-47 ...	2,877	14,385
1947-48 ...	2,544	12,720
1948-49 ...	965	4,825
1949-50 ...	2,575	12,875
1950-51 ...	2,592	12,960
1951-52 ...	1,987	9,935
1952-53 ...	383	1,915

Manure Mixtures

Prior to 1947-48, concentrated manures viz. sulphate of ammonia, bone meal and groundnut cake were distributed

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among cultivators for application to lands under food crops. In 1947-48, it was decided that concentrated manures should be supplied to fields in the form of mixtures, containing suitable doses of nitrogen and P 205. For a few years the sales were subsidised but later on the subsidy was withdrawn.

The following statement shows the quantity of manures mixtures distributed in the district since 1947-48:

Year	Quantity distributed in tons	Area covered in acres
1947-48 ...	144	1,152
1948-49 ...	67	536
1949-50 ...	546	4,368
1950-51 ...	1,200	9,600
1951-52 ...	950	7,600
1952-53 ...	982	8,800

The Sulphate of Ammonia.

Sulphate of ammonia is applied to paddy seedlings and crops like vegetables, banana and cotton. The following statement shows the quantity of the sulphate of ammonia distributed in the district:

Year.	Quantity distributed in tons.
1948-49 ...	60
1949-50 ...	242
1950-51 ...	233

Super phosphates.

The Department of Agriculture arranges to sell super phosphates to farmers at cost price. In the year 1949-50, 5 tons of phosphates were distributed in the district and 20 tons in the next year. As cultivators are quite new to the use of super phosphates it is used on a restricted scale.

Tank-bed manure.

In Surat district, there are 2,038 tanks and about 40 to 50-tanks are desilted every year. About one lac cubic feet of tank bed is used as a manure particularly for the paddy crope in *Kyari* lands. Though exact analysis is not available, it has been estimated that due to the application of tankbed manure to paddy fields in *Kyari* lands, the crop yields are increased by 10 to 15 per cent.

MANURES. Sheep and Goat folding.

Many cultivators allow sheep and goats to be quartered in their fields and the dung and urine which they drop serve as very good manure. It has been estimated that one thousand of these animals quartered in an acre over a night give manure equal to 40 lbs of nitrogen. There is a fairly large sheep and goat population, 2,04,801 according to the census of 1951, and they are a very good source for nitrogenous manure.

Green manuring

Many well to do cultivators grow *sann*, *guwar* etc. in their fields and bury the crops at the time of flowering. This enriches the soil considerably. It takes nearly sixty days for *sann* crop to flower and an acre of *sann* crop adds twenty five to forty thousand pounds of green manure to the fields. An acre under *sann* adds to the fields about 80-100 lbs. of nitrogen, 70-115 lbs. of potash and 30-35 lbs. of P 2.5.

ROTATION

The usual rotation of rops in the district is Cotton-Jowar-Cotton-Jowar-and so on. In the *Kyari* lands, paddy is transplanted in the *Kharif* season and in *rabi* season, if there is sufficient moisture, *val*, casterseed or gram are grown. In the lighter soils cotton is rotated with groundnut. Usually a mixed crop of *tur* with Jowar is taken in the district.

PESTS

There are various pests of crops in the district and mention of them is made in the following paragraphs. The damage done by the different pests cannot be accurately estimated, as the extent of it depends upon the severity of infestation in any particular year. The remedial measures mentioned against the different pests described below are such as may be adopted by the cultivators at the minimum cost.

Cereals

Juthi Italo the swarming caterpillars (*Spodoptera mauritia*) some times make a serious drepedation on paddy in the *Kharif* season. These insects feed on the green foliage and destroy the plant. For controlling this pest, 10 per cent BHC may be dusted at the rate of 20 lbs. per acre.

Titi ghoda, grass hopper, (*colemania sphenareoides*) is a serious and widespread pest. These pests are active during the period from July to September and mostly attack the crops of jowar, *bajri* and pulses in the *Kharif* season. This pest can be effectively checked by dusting the affected crops with 10 per cent BHC at the rate of 20 lbs. per acre.

Kansin, blister beetles (*Lytta sp.*), are insects which have upper wings converted to hard wing cases, and attack the earheads of the *bajri* crop during the *Kharif* season. The damage done is occasionally serious. These insects can be checked by dusting the affected crop with 10 per cent BHC at the rate of 20 lbs. per acre.

Katra, the hairy caterpillars, (*amascata sp.*) feed voraciously on leaves and after skeletouise them. They are active during the

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period from July to September and mostly attack bajri, maize and pulses in the *Kharif* season, particularly in the *gorad* soils.

PESTS

Some times this pest destorys the entire crop and in such cases re-sowing of the crops is done. This pest is controlled by poison-baits containing 5 per cent. BHC or DDT wettable powder with wheat bran or rice husk spread in the fields at the rate of 60 lbs. per acre. When these insects start migrating, an emulsion of DDT diluted at the rate of 3 lbs. in 100 gallons of water may be spread on the hedges, not on the plants. Though costly, Pyrethrum extract diluted a the rate of 1: 800 is the best remedy for these insects.

Juwarna gabhmara ni iyal, the jower stem-borer (*Chilo zonellus*) bores into the central shoot of the jowar plant and destroys it from within. In order to destory this pest, the stubbles of the previous harvest are uprooted and buried.

Vegetables

Moio or *mashi*, vegetable aphid, is a very widely distributed pest and consists of a number of species. Different species infest a number of different vegetables, such as cabbage, *nawalkol* and brinjals, both in the *Kharif* and the *rabi* seasons. These pests can be effectively controlled by spraying (*i*) fish oil resin soap (*ii*) tobacco decoction or nicotine sulphate and (*iii*) pyro colloid solution in the proportion of 1 in 800 parts of water.

Thrips, (thrips tabbacci), occasionally attack vegettable c ops such as onions, chillies and potatoes etc. These insects feed on the green leaves and shoots, with the result that the leaves turn yellow and dry up. Spraying the affected crop with tobacco decoction is found effective in checking this pest.

Fruits

Madhia, mango hoppers (idocerus atkinsoni, L) do considerable damage to the mango inflorescence. The pest is active from December to March. The nymphs and adults desap the young inflorescence, with the result that the tender developing fruits fall down prematurely. As a result of research carried out in the past, dusting with 5 per cent DDT and sulphur in equal proportions is found effective to control this pest. One or two pounds of this mixture is enough for a tree.

Phal makhi, the fruit fly (*dacus sp*) is a major pest occasionally reported as serious on *cucurbits*, mango, guava and *parval* etc. in the fruiting season. These maggots feed into the ripening fruits and damage them. The flies are trapped and destroyed. The affected fruits are removed from the trees and destroyed. In order to check further infestation, spot spraying on the crop with tartar emtic may be adopted.

Lila chusia, the jassids, (empoasca devastens D) generally attack the paddy and the cotton crops of the district. It can be effectively controlled by sparying 0.2 per cent DDT solution.

Udhai, white ants, mostly attack young trees particularly in *gorad* soils. To check the attack of white ants, 5 per cent DDT solution in kerosene oil may be applied to the stem of the tree one foot high from the ground. This method is applicable where the diameter of the stem is more than one foot. Where the trees are young. 0.2 per cent DDT, which can be obtained by mixing one lb. of 50 per cent wettable powder in 25 gallons of water, may be used to soak bark of the plants on or around grafts.

Undar, the rat, sometimes does much damage to wheat, rice, groundnuts etc. in the fields and also to the stored grains in the houses of the farmers. In the fields, rats are destroyed by hunting, trapping and poison baiting with barium carbonate or zinc phosphide.

Locusts generally do not appear in Surat district. But whenever they appear, the following control measures are undertaken:

(*a*) Creating smoke by burning the rubbish.

(*b*) Dusting the area with 10 per cent BHC.

(*c*) Burning of locusts by flame throwers.

Wild animal—The damage done to crops by wild animals is comparatively more in the areas adjoining forests in the district than other areas. There are no rifle clubs in existence in the district to check the menace of these animals.

DISEASES.

In addition to the damage done by pests, crops suffer from various diseases. The following are the important diseases of crops in the district:—

Anjiyo, the smut of jowar (*Spacelotheca sorghi*); these diseases are of four types of which the grain smut is the most destructive. It can be effectively controlled by treating the jowar seeds with sulphur before sowing. Its cost works out to an anna per acre.

Kamodi, the blast of rice (*piricularia* oryzae); this has been noticed in almost all the talukas of the district, but the damage, has been estimated as negligible. The Agriculture Department has recommended the treatment of seed with perenox as a remedial measure.

Geru, the rust of wheat (*puccima graminis trici*); this disease occurs in the district, particularly in the fields under irrigated wheat. Late rains and cloudy weather are favourable to this disease. The Agriculture Department has evolved a rust resistant type of wheat namely the *kenphad* and its seed is distributed among the cultivators.

Kodh, the mosaic of bhinda; it is a virus disease and is very destructive. The damage done to the crop by this disease is sometimes to the extent of 50 per cent. It is highly infectious. No remedial or control measures have yet been evolved.

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TENURES.

In Surat district the most prevalent form of tenure is *rayatwari* which accounts for 94.6 per cent or 16,01,476 acres of occupied land, and only 5.4 per cent or 90,412 acres are under the non-rayatwari tenures like *uran* and *udhad* Jamabandi. No land is exempt from paying land revenue except under tenures of contract or agreement or under the terms of any Act of the legislature. In the *rayatwari* tenure, the land revenue is fixed not upon an estate as a whole or on a village as a whole, but on an individual survey number or sub-divisions of those numbers. Under the *inam* tenure the land is held on a reduced assessment which is not liable to revision and in some cases is even free of any assessment. The land revenue assessments are fixed under the provision of the Land Revenue Code as amended in 1939. Assessment is based not only on advantages arising from rainfall or the kind of crop sown but also on advantages arising from soil, water resources and location. It is on account of this that agricultural lands are divided into three main classes, namely dry crop, rice and garden lands; and the classification value of soils of different grades of productivity is fixed in terms of annas. Land revenue settlements are ordinarily made every 30 years for a taluka. Lands used for agriculture are divided into groups on consideration of physical features and other factors mentioned in section 117-G of the Land Revenue Code. The assessment is fixed as the result of a settlement or revision settlement made in accordance with the rules laid down in the Land Revenue Code. In the case of an original settlement, the standard rate fixed for a group should not exceed 35 per cent. of the average of the rental values of all occupied lands in a group for a period of five years preceding immediately the year in which the settlement is directed. In the case of revision settlement, the existing aggregate assessment should not be increased by more than 25 per cent in the case of a taluka or a group or by more than 50 per cent in the case of a survey number or sub-division of it. These limits can be relaxed in special cases, such as highly irrigagted areas. The principle of varying the annual land revenue demand based on the assessment fixed on the basis of current prices has been accepted. For this purpose a comparison is to be made with prices of a period of five years immediately preceding the settlement. In case the current prices are lower than those which were taken into consideration for settlement purposes, a rebate is given on the scale fixed under the rules. In case prices rise, a surchage is leviable.

The assessment fixed under the settlement is not collected in full in all years. In years of distress, suspension of half or full rland evenue is given on the basis of the condition of crops. The lannua land revenue demand is then fixed on the basis of the *annewari*, which menns an estimate of yield of crops in a particular year relative to the standard normal yield which is equated to sixteen annas. The land revenue thus suspended in one year becomes due for recovery in the next or subsequent years if the crops are satisfactory. In case there is a succession of bad seasons, suspensions more than three years old are turned into remissions.

TENURES.

The *rayatwari* tenure system is sub-divided into two main forms (*a*) old or survey tenure and (*b*) new or restricted tenure.

(*a*) *The survey tenure*:—It is the most important and predominant form of tenure in the district. It is known as the survey tenure after the system of settlement with the rayats or occupants whose revenue payments are fixed after a careful measurement and classification of their lands. The tenure is often known as "occupancy" tenure. The occupant holds his lands direct from the Government. He has permanent right to hold the land in perpetuity so long as he pays the land revenue to the Government as fixed at the settlement. He has full powers to sell, mortgage, sublet or otherwise dispose of the land. The revenue fixed at a settlement is liable to revision at intervals of thirty years. Till 1939, the revision was based on factors like productivity of the soil, climate and general economic considerations, but according to the amendment to the Land Revenue Code made in that year, rental value has been definitely recognised as the basis of assessment.

Till 1946, the occupant of a land could lease a portion or whole of his holding on annual tenancy at a rent agreed upon with the tenant. But this right has been restricted by an amendment to the Bombay Tenancy Act, 1939, under which all tenancies were given a duration of a minimum of ten years. The maximum rent was also fixed.

(*b*) *The Restricted Tenure*:—This is a modified form of the *rayatwari* tenure and is known as the "new tenure." It was introduced in 1901. This form of tenure applied only to new occupancies granted. Under this tenure lands are granted at concessional rates of occupancy price only to bona fide cultivators belonging to backward classes, and that too on condition that the land shall not be transferred except with the permission of the Collector. Of course, the land is subject to the usual land revenue.

Inam tenure.

Land under this tenure is technically called "alienated land" which means "transferred in so far as the rights of Government to payment of the rent or land revenue, are concerned, wholly or partially, to the ownership of any person," as defined in the Land Revenue Code. The main feature of this tenure is that the land is held on a reduced assessment not liable to revision and in some cases held even free of assessment. The *inam* lands, have not been settled on their present holders under the Survey Settlement Act of 1893. These *inam* lands can be classified under four heads as follows:

"Personal" or "Jat" *inams*, including *saranjams* and *jahagirs*, generally mean grants by the State for performance of civil or military duty or for the maintenance of the personal dignity of nobles and high officials. Some of them were guaranteed by a special treaty between the Moghals and the British Government while others were settled by the *Inam* Commission. In the former

case, the tenure is hereditary and is to last in prepetuity, while in the latter case it is to last for short or long period of time as fixed by the commission. Ordinarily these inams are impartible and inalienable. There are instances in which a *jahagir* has been held to be partible and alienable but generally devolution of such *inams* is by the rule of lineal primogeniture, younger members being entitled only to maintenance.

Devasthan Inams: These are lands granted to religious bodies for maintenance of temples and mosques or similar institutions. The grant is made in perpetuity and the fixed amount of land revenue is not liable to revision. *Devasthan inams* are ordinarily inalienable and also impartible.

Succession to them is regulated by the term of the grant and the customs and usages of the endowment. The holder for the time being manages the *inam* in the capacity of a trustee for the benefit of the endowment.

Service Inams:--These are holdings of lands or rights to receive cash payments or to levy customary fees or perquisites for the performance of certain services to Government or the community. The holders of such *inams* or *watans* are divided into two classes i. e. firstly, district officers like the *desais*. who were the chief instruments for the collection of revenue under the Peshwas, and secondly, the village officers useful to the Government like the *patel* or *talati* who were provided adequate remuneration in this shape of lands or cash, and village servants useful to the community such as the *hajams*, *kumbhars*, *luhars*, *suthars*, *mochis* and other village artisans.

Udhad Jamabandi Tenure.

In Surat district, there are some lands under the *Udhad Jamabandi* tenure.

In some villages, or parts of villages, *vanta* lands entered as *sarkari* or Goverment are held on *udhad jamabandi* tenure, which means that they are liable to a fixed cess (*jama*) only, such *jama* remaining intact even at a general revision of assessment, there being a "right on the part of the occupants in limitation of the right of Government in consequence of a specific limit to the assessment having been established and preserved." Other villages, not *vanta*, are also held on this tenure. These villages have been surveyed in the lump only, and the fixed assessment has remained intact.

TENANCY.

Tenancy.—Cultivation of lands by tenants prevails both in *inam* lands and in *rayatwari* areas, although to a larger extent in the former than in the latter. Lease of lands to tenants occurs mainly because of landholders leaving the villages for better employment in cities. The transfer of lands to non-cultivating creditors has also tended to produce the same effect. These

tendencies are clearly brought out in the quinquennial statement of holdings in the district for the year 1952-53. (Table No. 13) The extent of tenancy in the district can also be judged from the statement of holdings given in table No. 12 on page 329. In 1952-53, out of the total area of 1,35,256 acres under *inam* tenure in the Surat district, as much as 49,843 acres or 36.8 per cent was in the hands of non-agriculturists receiving rents from the tenants cultivating the land. In the remaining 15,04,864 acres of khalsa lands, land held by non-agriculturists was estimated at 3,82,832 acres or 25.4 per cent of the total. Besides the non-agriculturist holders, sometimes even agriculturists holding very large areas rent out portions of their areas finding it more profitable to lease out the lands rather than to cultivate them.

According to the Manual of Revenue Accounts, four modes of tenant cultivation are in operation in the district namely, cash rent, crop share rent, a fixed quantity of produce as rent and a rent in service involving some mixture of the foregoing forms of rent. The terms of the contract vary in each case. The cash rent and the crop share rent are the two main forms of rent. Cash rents are preferred by the absentee landlords who usually reside in towns. The landholders who reside in the villages usually rent out lands on the crop share basis. These cash rents are usually paid for grass and garden lands.

Prior to the enactment of the Bombay Tenancy Act of 1939, relations between landlords and tenants were governed by the provisions of the Bombay Land Revenue Code of 1879. It was found that these provisions did not ensure equality of status to the tenant with the superior holder in matters of contract or agreement Many tenants who held the same lands for generations did not obtain right of permanency but continued to be tenants at will, liable to be deprived of their tenancy at the will of their landlords. In the absence of any legislation for the protection of tenants, rack renting was a familiar mode of exploitation of tenants by the landlords.

The Bombay Tenancy Act of 1939, which was applied to this district only in the year 1946 was passed with a view to ameliorating the conditions of tenants without injuring the legitmate interest of landlords. Those tenants who had held land for a period of not less than six years immediately preceding the first day of January 1932, were declared to be "protected tenants". Such tenants could not be evicted unless they ceased to cultivate the land personally or the landlord himself wanted to cultivate the land personally. It provided for the fixing of reasonable rent. Fresh leases were required to be of ten years' durations.

The Bombay Tenancy Act,1939 was amended in 1946 in the light of experience gained by its working in four districts. The Act itself was, however, replaced by the Bombay Tenancy and Agricultural Lands Act, 1948. The Act of 1948, while retaining the general provisions of the earlier legislation, added new features. The Act has statutorily fixed the maximum rate of rent at one-

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third and one fourth of the total produce in case of non-irrigated lands and irrigated lands respectively. It gives powers to the Government to fix rent at a rate lower than the maximum. A valuable right in favour of the protected tenants has been conferred by the Act in the form of the privilage of purchasing his holding from his landlord under certain conditions at a reasonable price. The Act limits the right of a landlord to terminate a protected tenancy on the ground of personal cultivation to the extent of 50 acres only. The right of a protected tenant to purchase the lands cultivated by him is also limited only to the extent of making his own holding amount to 50 acres. He is not allowed to purchase his landlord's holding below fifty acres. The onus of continuing a protected tenancy to the heirs of the deceased protected tenant is shifted on to the landlord. Other important provisions of the Act are the ones which enable Government to assume management of the estate of a landholder for the purpose of improving the economic and social conditions of peasants or for ensuring the full and efficient use of land for agriculture. A provision is made for payment to the lawful holders of the net surplus in respect of estates taken over for management after deductions of the appropriate cost incurred by Government and the amount, if any, required for the liquidation of debts and liabilities. The Act prohibits transfer of agricultural lands to non-agriculturists, but the Collector may permit such transfers in exceptional cases. The land-lord has to transfer his agricultural lands to persons in the following priority.— (*i*) the tenant in actual possession of the land, (*ii*) the persons or persons personally cultivating any land adjacent to the land to be sold, (*iii*) a co-operative farming society, (*iv*) any other agriculturist and (v) any other person who has obtained from the Collector a certificate that he intends to take to agriculture.

During the year 1954-55, there were 1,64,839 tenants in Surat district. Their categories have been shown below:—

(1)	Permanent tenants	3,559
(2)	Protected tenants	1,23,153
(3)	Ordinary tenants	32,972
(4)	Khatedar tenants	1,009
(5)	Crop-share tenants	4,073
(6)	Other tenants	73

TABLE No. 29

THE NUMBER OF APPLICATIONS FILED UNDER THE TENANCY ACTS DURING THE PERIOD BETWEEN 1946-47 AND 1952-53.

Year	Total No. of cases filed	No. of cases disposed of	No. of cases pending	No. of cases decided in favour of tenants	No. of cases decided in favour of landlords	The Rest
1946-47	666	631	35	330	72	229
1947-48	2,636	2,496	140	1,299	817	380
1948-49	3,398	3,062	336	1,087	1,614	361
1949-50	5,224	4,617	607	1,820	2,090	707
1950-51	6,593	6,227	366	2,948	2,288	997
1951-52	6,949	4,780	2,169	2,548	1,376	856
1952-53	8,241	6,615	1,626	2,803	2,190	1,622

THE BOMBAY TENANCY AND AGRICULTURAL LANDS (AMENDMENT) ACT, 1955.

Since 1948 many amendments have been made to the Act. The most important of them was however, the one made by the Bombay Tenancy and Agricultural Lands (Amendment) Act, 1955 which was passed with a view to (*i*) vesting occupancy rights in lands on the tiller of the soil. (*ii*) redistributing land by the imposition of ceilings on individual holdings and (*iii*) providing the facility to the small holders to acquire lands as far as practicable upto the economic holding.

The most important feature of the amending Act is that which deals with tenants' right to purchase the land they cultivate. It laid down that, on April 1, 1957, also called the "Tillers' Day", all the tenants who cultivated personally and in respect of whom the landlords had not initiated proceedings by December 31, 1956 to resume land for personal cultivation were to be deemed to have purchased the land cultivated by them from the landlords upto the area prescribed under the Act as a ceiling for an individual owner, and at the price to be fixed by the Agricultural Lands Tribunal. In computing the ceiling area the land owned by the tenant is also taken into consideration. The purchase price was to be fixed at six times the rent in the case of permanent tenants and between 20 and 200 times the assessment in respect of other tenants. In the case of tenants other than permanent tenants the value of improvements effected by the landlord is also to be added to the price of land. The price is to be ordinararily paid by permanent tenants in one lump sum within an year of purchase; others may either pay it in one lump sum or in annual instalments not exceeding 12 with simple interest at 4½ per cent. In the case of a new tenancy created after the "Tillers Day" the tenant must purchase the land cultivated by him within one year from the commencement of the tenancy.

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In case a tenant does not intend to purchase, or fails to exercise the right to purchase the land within the specified period, the Collector may terminate the tenancy and summarily evict the tenant. Even though the land cultivated by the evicted tenant would revert to the landlord he is entitled to retain only so much area as will be sufficient to raise the area in his possession up to the ceiling. The land in excess of the ceiling area would be disposed of to other persons with due regard to the order of priority stipulated in the Act.

The rents, which are made payable in cash only, will be payable by the tenant at a rate to be fixed by the *Mamlatdar* for a village or a group of village within the maximum and minimum limits laid down in the Act. The liability of paying land revenue, local fund cess and irrigation cess in respect of the land is transferred to the tenant. It may be noted that as a result of the extension of the special rights conferred on protected tenants to all tenants in general the distinction between the protected and the ordinary tenant has been removed. A landlord who intends to resume land for personal cultivation can reject a protected or ordinary tenant subject to certain conditions, provided a notice is served on the tenant for resumption by December 31, 1956. In all cases of evictions, however, the tenant who is affected should be left with an area which is equal to or more than half the area leased to him previously.

The Act defines an economic holding as (*i*) 16 acre of *Jirayat* land, or (*ii*) eight acres of seasonally irriagated land or paddy or rice land, or (*iii*) four acres of perennially irrigated land. The ceiling limit on individual holdings is stipulated at three times the economic holding. Holding land in excess is declared unlawful.

Restrictions have been laid down on the future transfers of agricultural land. Land purchased by tenants under the provisions of this Act can only be transferred with the permission of the Collector. Land cannot be transferred, sold or mortgaged to a person who is not an agriculturist. Further, where a landlord intends to sell any land, he has to apply to the Agricultural Lands Tribunal for determination of reasonable price. After its determination the land has to be offered according to the order of priority stipulated in the Act.

The amendment Act has provided for some exemptions in respect of co-operatives. Some of the provisions regulating the relationship between landlord and tenant, as also those relating to restrictions on transfer of land, are not applicable to lands held or leased by co-operatives.

RURAL WAGES.

Wages paid to the Casual Labour.

In Surat district, landholders employ casual field labourers when there is a rush of work on the farm. Most of the heavy

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Wages paid to the casual labour

work is done by men while female labour is generally employed for lighter work, such as weeding, threshing etc. Children are also employed sometimes. These casual labourers are employed on a daily wage basis. They are generally paid in cash and in most cases are also provided with tea, food and tobacco or *bidis* as smoking material. At some places, women and children are not provided with any kind wages in addition to cash. In Navsari taluka, men labourers are also given some cereals, about 5 lbs., in addition to their usual wages. In Bardoli taluka, children are employed on monthly wages basis and are given Rs. 5 per month each with tea, food and clothing. The following statement shows the rates of wages paid to the casual labour in the district.

TABLE No. 30

STATEMENT SHOWING RATES OF DAILY WAGES PAID TO THE CASUAL LABOUR IN SURAT DISTRICT (1953-54)

Taluka/Mahal	Male	Female	Child
	Rs. as. p.	Rs. as. p.	Rs. as. p.
Bansda	1 0 0	0 12 0	0 8 0
Bardoli	1 0 0	0 10 0	Nil.
Bulsar	1 0 0 to 1 4 0	0 12 0 to 1 0 0	0 10 0 to 0 12 0
Chikhali	0 12 0 to 1 0 0	0 8 0 to 0 14 0	0 6 0 to 0 10 0
Chorashi	0 12 0 to 1 0 0	0 8 0 to 0 12 0	Nil.
Dharampur	1 0 0	0 8 0	0 6 0
Gandevi	0 12 0 to 1 4 0	0 6 0 to 1 0 0	0 5 0 to 0 6 0
Kamrej	0 8 0 to 1 0 0	0 10 0 to 0 12 0	0 6 0 to 0 8 0
Mahuwa	0 12 0 to 1 0 0	0 12 0	0 8 0 to 0 10 0
Mandvi	0 8 0	0 12 0	0 8 0 to 0 12 0
Mangrol	1 0 0	0 12 0	Nil.
Navsari	1 0 0 to 1 8 0	0 12 0 to 1 0 0	0 8 0 to 1 0 0
Olpad	0 8 0	0 10 0	Nil.
Palsana	1 0 0	0 12 0	Nil.
Pardi	1 0 0 to 1 8 0	0 12 0 to 1 4 0	0 12 0 to 1 0 0
Songadh	0 12 0	0 8 0	0 6 0
Valod	0 8 0	0 12 0	0 12 0
Vyara	0 12 0 to 1 0 0	0 10 0 to 0 12 0	0 12 0

From the above table, it is evident that the average wage rate for a male labour is Rs. 1-2-0 per day. Wages in the talukas of Pardi and Navsari are the highest while the lowest have been recorded in the talukas of Valod, Olpad, Mandvi and Kamrej. A female labourer is on an average paid 0-11-9 per day, the wages varjing from 0-6-0 in the taluka of Gandevi to Rs. 1-4-0 per day in the taluka of Pardi. The wages of child labour vary from 0-5-0 per day in

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Gandevi to Rs. 1-0-0 in the talukas of Navsari and Pardi, the average being 0-7-0 per day in the district. It has been noticed that wages in the talukas of Pardi and Navsari are higher than the other talukas of the district. This may probably be due to their proximity to urban and industrial centres. Navsari is the highly industralised taluka in the district with the result that quite a a large number of people are attracted towards its industrial units and this factor tends to push up the wages in the adjacent rural areas. The case with Pardi is a little different. Though essentially rural in nature, Pardi taluka grows abundant grass, rice, fruits and vegetables which command excellent business both in the district as well as outside. Larger number of labourers are required on these plantations and this factor is chiefly responsible for higher wages in the Pardi taluka.

Wages according to the nature of operations.

The system of paying wages according to the nature of operations is prevalent in all the eighteen talukas of the district. Wages in such cases are on the daily wage basis. The cash wages are in most cases supplemented by food, tea, breakfast and smoking material. The following figures show the rates of wages according to the nature of operations.—

TABLE No. 31

STATEMENT SHOWING RATES OF DAILY WAGES PAID TO LABOURERS ACCORDING TO THE NATURE OF OPERATIONS IN SURAT DISTRICT (1953-54)

Taluka/Mahal.	Operating implements (viz. Ploughing, harrowing, sowing, carting etc.	Harvesting of grains such as bajri, paddy, wheat etc.	Threshing of grains.	Contract labour for special operations of sugarcane such as harvesting crushing, juice boiling, gur making etc.	Remarks.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
1. Bansda ...	1- 0-0	1- 0-0	1- 0-0	1- 0-0	1. Sometimes, 5 lbs. of paddy is given in lieu of cash wage for harvesting. 2. Sometimes, 5 lbs. of paddy is given in lieu of cash wage for threshing.
2. Bardoli ...	1- 0-0	1- 0-0	1- 0-0	Nil	
3. Bulsar ...	1- 0-0 to 1- 8-0	1-0 -0 to 1- 8-0	1- 0-0 to 1- 8-0	1- 0-0 to 1- 8-0	In addition, some gur and sugarcane juice is also given in the case of contract labour for special operations.
4. Chikhali ...	0-12-0 to 1- 0-0	0-12-0 to 1- 0-0	0-12-0 to 1- 0-0	0-12-0 to 1- 0-0	In addition, one lb. of gur is also given in the case of contract labour for special operations.
5. Chorashi ...	0-12-0	0-12-0	0-12-0	Nil	
6. Dharampur.	1- 4-0	1- 4-0	1- 4-0	1- 4-0	
7. Gandevi ...	1- 0-0 to 1- 4-0	1- 0-0 to 1- 4-0	0-10-0 to 1- 4-0	0-12-0 to 1- 4-0	At places, 9 lbs. of paddy is given in lieu of cash wage for harvesting.
8. Kamrej ...	0- 8-0 to 1- 0-0	0- 8-0 to 0-10-0	0- 8-0	Nil	
9. Mahuva ...	1- 0-0	0-12-0 to 1- 0-0	0-12-0	1- 0-0	1. At places, 2 lbs. of paddy or jowar is given in lieu of cash wage for harvesting. 2. In addition, 1 lb. of gur is also given in the case of contract labour for special operations.

TABLE No. 31 (*contd.*)

Taluka/Mahal.	Operating implements (viz. Ploughing, harrowing, sowing, carting etc.	Harvesting of grains such as bajri, paddy, wheat etc.	Threshing of grains.	Contract labour for special operations of sugarcane such as harvesting crushing, juice boiling, gur making etc.	Remarks.
10. Mandvi ...	0- 8-0	0-12-0	Nil.	Nil.	
11. Mangrol ...	1- 0-0	1- 0-0	1- 0-0	Nil.	
12. Navsari ...	1- 0-0 to 1- 8-0	0-12-0 to 1- 0-0	0-12-0 to 1- 0-0	1- 0-0 to 1- 8-0	In addition some quantity of gur is also given in the case of contract labour for special operations.
13. Olpad ...	0- 8-0	0-12-0	0- 8-0	Nil.	
14. Palsana ...	1- 0-0	1- 0-0	1- 0-0	Nil.	
15. Pardi ...	1- 0-0 to 4- 0-0	1- 4-0 to 1- 8-0	1- 0-0 to 1- 8-0	1- 0-0 to 1- 8-0	In addition, some gur and some sugarcane juice is also given in the case of contract labour for special operations.
16. Songadh ...	2- 0-0	0-12-0	0- 8-0	Nil.	In addition, 5 lbs. of grains are given for threshing
17. Valod ...	1- 0-0	1- 0-0	1- 0-0	0- 8-0	In addition, 10 lbs. of gur is also given in the case of contract labour for special operations.
18. Vyara ...	1- 0-0	1- 0-0	1- 0-0	0- 8-0	In addition, 10 lbs. of gur is also given in the case of contract labour for special operations.

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It has been observed that labourers are paid higher wages for those operations which involve heavy manual work. For operating agricultural implements, the average wage rate comes to Rs. 1-1-6 per day. In Pardi, for this operation, as much as Rs. 4-0-0 per day is paid while in the Mandvi and Olpad talukas only Rs. 0-8-0 are paid. In other talukas the wages for the same work vary between Rs. 0-12-0 and Rs. 1-8-0. Besides food, tea, breakfast and smoking material, no other payments in kind are made to labourers in this category. In none of the talukas of the district, the cash wage is replaced by kind payments.

Harvesting and threshing, though equally important, entail less strenuous labour than operating implements and therefore command less wages. The average wage rate for harvesting comes to Rs. 0-15- 3 only. In Bulsar and Pardi talukas, wages for threshing are as high as Rs. 1-8-0 while in Kemrej taluka, for the same operation it is annas eight only . In other talukas, it varies between Rs. 0-12-0 to Rs. 1-4-0. In the talukas of Bansda, Gandevi and Mahuwa, sometimes quantities of food grains are paid to labourers in lieu of the cash wages. In Bansda taluka, 5 lbs. of paddy is given in place of daily cash wage whereas in Gandevi and Mahuwa taluka 9 lbs. and 2 lbs. of paddy or jowar respectively are given. No where in the district are cash wages supplemented by any payments in kind except food, tea, breakfast and smoking materials.

Wages for threshing out grains are the highest in the talukas of Pardi and Bulsar i.e. Rs. 1-8-0 per day while the lowest are in the talukas of Songadh, Kamrej and Olpad where they are only Rs. 0-8-0. In other talukas they vary between Rs. 0-10-0 to Rs. 1-4-0. However, the average wage rate for this operation for the whole of the district works out at Rs. 0-13-9. In Bansda taluka cash wage is sometimes substituted by 5 lbs. of paddy. Labourers under this category get food, tea, breakfast and smoking material when on work. In Songadh taluka, which records the lowest cash wage rate in this category, the labourer in addition to his daily cash wages gets 5 lbs. of food grains.

Labourers for special operations connected with sugarcane and gur making are employed in ten out of the eighteen talukas of the district and these talukas are Bansda, Bulsar, Chikhali, Dharampur, Gandevi, Mahuwa, Navsari, Pardi, Valod and Vyara. The average daily wage rate for such operation in this district comes to Rs. 0-15-9. The talukas of Pardi, Navsari and Bulsar record as high a wage as Rs. 1-8-0 per day for these operations whereas Valod and Vyara record the lowest i.e. Rs. 0-8-0 only. In Bulsar, Chikhali, Mahuwa, Navsari, Pardi, Valod and Vyara some gur and sugarcane juice in varying quantities are given to labourers doing this type of work in addition to their cash wages.

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Annual servants. (*Halis*.)

Annual servants (*halis*) are employed in Surat district by those cultivators whose holdings can provide continuous and regular employment for the whole of the year. A *hali* is usually bound to do all types of farm work and should be available all the hours of the day and night. The contract with the *hali* is generally for one year and may be renewed if both the parties so desire. Sometimes these annual servants borrow large sums of money from their employers and in such cases they have to remain with the latter till the whole debt is paid up. Women and children are generally not employed as *halis*, though women work as annual servants in the talukas of Dharampur, Kamrej and Mandvi, and children also work similarly in the talukas of Bulsar, Dharampur Kamrej and Mandvi. Women and children, however, are not given very heavy work and consequently their wages are also smaller.

A *hali*, besides his cash wage, is provided with other facilities like, food, tea, smoking materials, accomodation, clothes, footwear etc. The annual wages of halis vary from taluka to taluka as shown in the following statement.

TABLE No. 32

STATEMENT SHOWING THE RATES OF WAGES PAID TO *Hali* OR ANNUAL LABOURERS IN SURAT DISTRICT : (1953--54)

Taluka/Mahal	Type of labour.	Wages in cash. (in Rs.)	Other facilities, such as supply of food, clothing, tea smoking etc.
1. Bansda ...	Man	50- 0-0	Food, tea smoking material, a pair of shoes and two pairs of clothes.
2. Bardoli ...	Man	120- 0-0	Do. Do. Do.
3. Bulsar ..	Man	96- 0-0 to 200- 0-0	Do. Do. Do. In addition on occasions of births and marriages in the family, they are given some additional cash presents e. g. Rs. 10 at the time of marriages and Rs. 500 at the time of birth.
	Boy	30-0-0	
4. Chikahli ...	Man	180- 0-0 to 270- 0-0	Food, tea, smoking materials, clothes, shoes and some cash gifts at the time of festivals like Diwali etc. At some places, no cash wage is given and instead they are given 5 to 7 seers of Jowar, paddy or kodra.
5. Chorashi	Man	140- 0-0 to 150- 0-0	Food, tea, smoking material, clothes and shoes.
6. Dharampur	Man	156- 0-0	Food, Breakfast and tea only.
	Woman	72- 0-0	
	Boy	96- 0-0	
7. Gandevi	Man	100- 0-0 to 175- 0-0	Food, tea, smoking material, clothes and shoes.

TABLE No. 32—(*contd.*)

Taluka/Mahal	Type of labour.	Wages in cash. (in Rs.)	Other facilities, such as supply of food, clothing, tha smoking etc.
8. Kamrej ...	Man	100- 0-0 to 180 -0-0	Food, tea, smoking material, clothes and shoes.
		360- 0-0	Without any facilities.
	Woman	24- 0-0 to 60- 0-0	Food, tea, smoking material, clothes and shoes.
		180 -0-0	Without any facilities.
	Boy	36- 0-0 to 60- 0-0	Food, tea, smoking material, clothes and shoes.
9. Mahuwa	Man	50- 0-0	Food, tea, smoking material, clothes and shoes.
10. Mandvi ...	Man	360- 0-0 100- 0-0 to 150- 0-0	Without and facilities. Food, tea, smoking material, clothes and shoes.
	Woman	36- 0-0	Without any food.
	Boy	48- 0-0	Food, tea, smoking material, clothes and shoes.
11. Mangrol	Man	150- 0-0	Food, tea, smoking material, clothes and shoes.
12. Navsari	Man	100- 0-0 to 150- 0-0	Do. Do. Do.
13. Olpad ...	Man	150- 0-0	Do. Do. Do.
14. Palsana ...	Man	180- 0-0	Do. Do. Do.
15. Pardi ...	Man	240- 0-0	Food only. But more common practice is to give 5 to 6 seers of grains, tea, food, smoking materials, clothes shoes and cash gifts on festivals and other occasions.
16. Songadh	Man	150- 0-0	Food, tea, smoking material, clothes and shoes.
17. Valod ...	Man	120- 0-0	Do. Do. Do.
18. Vyara ...	Man	120- 0-0 to 200- 0-0	Food, tea and smoking material only. Practice of giving clothes and shoes have been recently discontinued.

The wage varies from Rs. 50 to Rs. 270 with facilities of food tea, clothing smoking material, foot-wear etc. In few cases where none of the other facilities are provided, consolidated higher cash wages are given to *halis*. In kamrej and Mandvi talukas, some *halis* get Rs. 360 per annum without any other facilities. The wages of a *hali woman* vary between Rs. 24 and Rs. 72. In Mandvi, some *hali women* are paid Rs. 36 without any other facility whereas in Kamrej such consolidated cash payment is Rs. 180. A child *hali* is paid between Rs. 30 and Rs. 96 per annum in the district.

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Vasavayas.

Some artisans of the village are actively connected with agriculturists at various stages of their operations. They are the *vasavayas* of the traditional village economy who still survive, though in a less recognised form. These *vasavayas* include the carpenters (*suthar*), the black smiths (*luhar*), the cobbler (*mochi*), the barber (*hajam*), the potter (*kumbhar*) and the watchman (*paggy*). Of these, the first four play an important role in agricultural operations.

In the old traditional barter economy, these artisans used to render service to agriculturists and would receive remuneration in kind from them, generally in food grains at the time of harvests. But with the changing circumstances, the system of payment in kind started gradually declining and there has been noticed a marked tendency to make payment in cash. The food shortage during the period 1941-1945 also affected the system of kind payments considerably. And it is found that over a greater portion of the district cash payments have replaced the kind payments to those *vasavayas*. Landholders do not even enter into an annual cash contract with the artisans and prefer to get things done on piece rates.

However, payments in kind does prevail in some parts of the district particularly in the talukas of Bulsar, Gandevi, Kamrej, Mahuwa, Mandvi, Navsari, Valod and Vyara. The following table shows in detail the rates of wages paid to the *vasavayas* (both in cash and kind) in Surat district.

TABLE No. 33

STATEMENT SHOWING RATES OF WAGES PAID TO THE *Vasavayas* (VILLAGE ARTISANS) IN SURAT DISTRICT (1953-54).

Taluka/Mahal	*Carpenter (*Suthar*)	*Blacksmith (*Luhar*)	*Cobbler (*Mochi*)	*Barber (*Hajam*)
1. Bansda ...	*Cash* : 2-0-0 per day plus meals and tea.	*Cash* : 0-3-0 per implement.	0-20 seers of Paddy	*Cash* : 0-6-0 per head.
2. Bardoli ...	*Cash* : Rs. 3-0-0 per day plus meals and tea.	*Cash* : according to the nature of work.	Dead bodies of the animals are given to him and he in return supplies all the leather articles needed for agricultural purposes	0-30 seers of foodgrains.
3. Bulsar ...	30 seers to 2 mds. of paddy and 7½ seers to 20 seers of pulses.	2 mds. of paddy and ½ md. of pulses.	Same as in Bardoli taluka. In addition 0-20 seers of paddy and 2½ seers of pulses are also given.	0-30 seers of paddy per head.
	At places, on cash basis according to the nature of work.	At place, cash according to the nature of work.		
4. Chikhali ...	*Cash* : Rs. 2 to Rs. 3 per day plus meals, tea and smoking materials.	*Cash* : 0-3-0 per implement.	*Cash* : Rates not specified.	1 md. of paddy per head.
5. Chorashi ...	*Cash* : Rates not specified.	*Cash* : Rates not specified.	*Cash* : Rates not specified.	25 to 30 seers of jowar per head.

* *Reference*—

1. *Suthar*—For supplying and repairing carts and farm implements.
2. *Luhar*—For making iron *kos*, supplying and repairing farm implements made of iron.
3. *Mochi*—For repairing and supplying leather accessories necessary on the farm.
4. *Hajam*—For shaving cattle shaving and hair dressing adults and children and attending marriage ceremonies.

TABLE No. 33 (*contd.*)

STATEMENT SHOWING RATES OF WAGES PAID TO THE *Vasavayas* (VILLAGE ARTISANS) IN SURAT DISTRICT (1953-54).

Taluka/Mahal	*Carpenter (*Suthar*)	*Blacksmith (*Luhar*)	*Cobbler (*Mochi*)	*Barber (*Hajam*)
6. Dharampur ..	*Cash* : Rs. 3-8-0 per day ...	*Cash* : Annas 2 to 6 per implement.	Same as in the Bardoli Taluka Sometimes leather articles are purchased on cash payment.	*Cash* : 0-3-0 per head.
7. Gandevi ...	0-30 seers to 1 md. 10 seers of paddy or Jowar. At some places cash payment of Rs. 3-0-0 per day.	0-30 seers to 1 md. 10 seers of paddy or jowar At some places, cash payment of Rs. 3-0-0 per day.	Same as in the Bardoli taluka plus 0-20 seers of paddy or jowar. At some places, cash payment of Rs. 3-0-0 per day.	0-20 seers of paddy and 5 lbs. of gur per head. Cash payment of Rs. 5 per annum is made for doing the nursing work and midwifery during the child birth in the family.
8. Kamrej ...	10 to 15 lbs. of Jowar per pair of bullocks. A places, cash paymnet of of Rs. 3-0-0 per day.	10 lbs. of foodgrains per pair of bullocks. At places, cash payment of Rs. 3-0-0 per day.	20 lbs. of jowar per pair of bullocks.	60 to 100 lbs. of jowar per head. At places, cash payment of 0-6-0 per head.
9. Mahuwa ...	1 B.Mds. of paddy.	*Cash* : Rs. 10-0-0 to Rs. 15-0-0 Plus food on festivals.	Cash : Rs. 10-0-0	0-25 seers of jowar per head and food and cash gift of Re. ¼ on festivals.
10. Mandvi	15 lbs. of jowar per pair bullocks.	Cash : Rates not specified.	Same as in the Bardoli taluka.	60 lbs. of jowar per head.
11. Mangro. ...	*Cash* : Rates not specified	*Cash* : Rates not specified.	*Cash* : Rates not specified.	0-25 seers of jowar per head.
12. Navsari ...	*Cash* : Rs. 2-0-0 to Rs. 8-0-0 At places in addition to cash wages, 20 seers to 1 md. of foodgrains like jowar or paddy are also given.	0-30 seers of paddy. At places, cash payment is done. Rates not specified.	20 to 25 seers of paddy At places, cash wage of Rs. 10-0 plus 2 lbs. of paddy or 5 lbs. of jowar is also given.	15 seers to 1 B. md. of jowar per head. At pleaces, cash wage at the rate 0-2-0 to 0-4-0 pe head is given.

13. Olpad	*Cash*: Rs. 4-0-0 per day.	*Cash*: Rs. 5-0-0 per day.	3 mds. of jowar.	20 to 30 seers of jowar per head.
14. Palsana	*Cash* : Rates not specified	*Cash* : Rates not specified.	*Cash* · Rates not specified	25 seers of jowar per head.
15. Pardi ...	*Cash* : Rs. 4-0-0 per day	*Cash* : Rates not specified.	Same as in the Bardoli taulka.	2 to 3 mds. of paddy per head. at places, cash payment of 0-8-0 per head.
16. Songadh ...	*Cash* : Rs. 3-8-0 per day'	*Cash* : Rates not specified.	Nil	*Cash* : 0-4-0 perhead.
17. Valod ...	1 md. 20 seers of foodgrains per pair of bullocks. At places, cash payment is also made.	*Cash* : 0-2-0 to 0-8-0 per implement	Same as in the Bardoli taluka plus 10 lbs. of foodgrains	1 md. 20 seers of foodgrains per head.
18. Vyara ...	1 md. 20 sees of foodgrains	*Cash* : 0-1-0 to 0-8-0 per implement	Same as in the Bardoli taluka plus 10 lbs. of foodgrains.	1 md. 20 seers of foodgrains per head.

* *Reference*—

1. *Suthar*—For supplying and repairing carts and farm implements.
2. *Luhar*—For making iron *kos*, supplying and repairing farm implements made of iron.
3. *Mochi*—For repairing and supplying leather accessories necessary on the farm.
4. *Hajam*—For shaving cattle, shaving and hair dressing adults and children and attending marriage ceremonies.

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Wherever kind payments prevail, the commodities which are given to those artisans by way of wages include food-grains like paddy, jowar and pulses. In some places, cobblers are given the dead bodies of the animals and in return they provide agriculturists with leather accessories required on the farm like leather strap, leather thread, *kos* etc., and do the repair also. At some plaçe wheres cash payments prevail, artisans are given tea, food and smoking material if they work for the whole of the day.

It is evident from the above table that barbers are the only artisans who receive kind wages throughout the district except in the talukas of Bansda, Dharampur and Songadh. Next come the cobblers who are paid in kind in all the talukas except those of Chikhali, Chorashi, Mahuwa, Mangrol and Palsana.

Black-smiths and carpenters are the artisans who are more widely paid in cash. Payment of wages in kind is made to black-smiths only in the four talukas of Bulsar, Gandevi, Kamrej and Navsari, and to carpenters in talukas of Bulsat, Gandevi and Kamrej. Even in these talukas, black-smiths and carpenter sometimes are given small cash amounts in addition to their wages in kind.

FAMINE.

The district of Surat is situated in an area which is not generally liable to famines and scarcities. It has an assured rainfall and is well served by a number of rivers. However during the past four hundred years, some years were bad and an account of those bad seasons is given in the following paragraphs.

As recorded in the old Surat Gazetteer, the whole of the Bombay province was affected by famines in the years 1623, 1717, 1747, 1790 and 1803. Surat was also affected but details of the distress and the relief work are not available. Since the acquisition of Surat by the British Government (1800-1817), no famine had occured sufficiently wide spread or intense in nature to seriously affect the condition of the people. During the period between 1820 and 1860, the seasons marked by more or less general dearth when grain prices rose abnormally high were those of 1824-25, when a general remission of the land revenue was granted and Government spent a sum of Rs. 1,00,000 on public works for improving the water supply of the district, 1831-32 when remissions to the extent of Rs. 3,70,400 were granted and 1838-39 when, besides remitting Rs. 4,96,120 of revenue, the poor were employed in public works.

1824-25

1831-32

1838-39.

1864, 1871, 1877.

In 1864 and in 1871 there was scarcity in some parts of the district owing to partial failure of the monsoon. In 1877 tanks and similar works offered relief.

FAMINE 1899-1902.

The whole of the Bombay Presidency was in the grip of a severe famine during the period between 1899 and 1902. The famine in the year 1899-1900 was of unprecedented severity and was caused by the scantiness of both early and late rains. In the *kharif* tracts, the rainfall in the month of June was sufficient for the sowing of early crops but in July and August it was so light that the crops withered away and there was not enough rain in September to save them. The *rabi* crops also were destroyed before coming to ears on account of the failure of late rains. A great portion of the district was affected by this famine. The eastern portions, particularly the north-east corner of the Mandvi taluka were most affected by the scarcity. The Valod mahal, Bardoli taluka, and the talukas of Chikhali and Pardi were also seriously affected areas.

Relief works were started in the district both by Governement and the District Local Board. Distressed hill tribes were provided with employments by the Forest Department. Cash dolls were given to the needy. Tagai loans were advanced to cultivators for the purpose of agricultural improvements. Loans were also advanced for the purchase of seeds and cattle.

1900-01

The season of 1900-01, although not so disastrous as the preceding one, was far from satisfactory. Owing to the late break of the monsoon and the failure of the late rains, the yield of the *kharif* crops was poor and the *rabi* crops were more or less completely lost. The relief works were continued in the district. Land revenue remissions and suspensions were also granted. Cheap grain was imported from other parts of the country and distributed in the district and this measure helped to keep the prices of food-grains lower.

With a light and intermittent monsoon, the season of 1901-02 presented a close resemblance to that of 1900-01. Breaking late in July, the early rains were only barely sufficient for the *kharif* crops while the winter rains failed almost entirely. The situation was further aggravated by an unprecedented plague of rates and locusts which caused considerable damage. All the relief measures were continued.

1902-03.

The season of 1902-03, set in ominously and the lateness of monsoon gave rise to the greatest anxiety, which was, however dispelled by an abundant rainfall towards the end of August and it was found possible to close all relief works before the beginning of the next year.

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FAMINE 1918-19.

The year 1918-19 which was a year of such an acute distress over the most of the presidency was but a lean year in this district and no relief measures were needed.

1951-52.

During the past 3½ decades, there has been no famine in Surat except that in the year 1951-52 Some portions of the district faced acute scarcity conditions on account of the failure of monsoon.

CHAPTER 6—INDUSTRIES

CHAPTER 6.

Industries.

INTRODUCTION.

ACCORDING TO THE 1951 CENSUS, Surat district has a population of 2,70,600 persons (1,40,409 men and 1,30,191 women) engaged in various industries. Out of them 70,173 are self-supporting persons; 1,72,528 are non-earning dependants and 27,899 are earning dependants. The distribution of self-supporting persons, engaged in various industries is given in Economic Table B III of the 1951 Census Report. The table below is extracted from the same and it gives statistics relating to 'economically active (i.e. self-supporting) persons' engaged in manufacturing industries i.e. (a) processing and manufacture-foodstuffs; textiles, leather and products thereof (b) processing and manufacture-metals, chemicals and products thereof and (c) processing and manufacture not elsewhere specified.

In the following pages of this chapter, individual industries are treated with regard to the raw-materials required, tools and equipment used, products and by-products manufactured and the total productive capital employed. In the section on village industries, a general description of the selected industries is given.[1]

LARGE SCALE INDUSTRIES

Bobbins and Textile Accessories.

Though great potentialities exist for the develpment of this industry, substantial progress is not visible in all lines of manufacture except in the manufacture of bobbins. The first factory was established in 1925 and since then the industry has been developing. In 1953, there were 12 units, registered under the Factories Act, 1948. Of them, two were located in Surat, three in Navsari, two in Bilimora, four in Bulsar and one in Bardoli. Their products meet the needs of textile mills in the district. The statistical information about 10 of these 12 units for 1953 was as follows. The total fixed and working capital was Rs. 20.3 lakhs and Rs. 9 lakhs respectively. They gave employment to 762 workers and their total wage bill was Rs. 4.3 lakhs. 49

[1] Information given is based on the data supplied by the office of Director of Industries and Statistics Authority, Bombay ; office of the Assistant Director of Cottage Industries and Assistant Registrar of Industrial Co-operatives, Surat and the data collected by this office.

TABLE No. I

PERSONS ENGAGED IN INDUSTRIES UNDER "PROCESSING AND MANUFACTURE" IN 1951

S. No.	Classification of Industries.	Employers		Employees		Independent workers		Total	
		Male	Female	Male	Female	Male	Female	Male	Female
1	2	3	4	5	6	7	8	9	10
	I. Food-stuffs, Textiles, Leather and Products thereof	2,288	119	24,975	1,102	10,745	2,098	38,008	3,319
1	Food Industries otherwise unclassified ...	22	2	127	—	333	16	482	18
2	Grains and Pluses	209	2	485	7	345	22	1,039	31
3	Vegetable oil and dairy products	95	1	571	22	229	16	895	39
4	Sugar Industries	5	1	27	1	3	—	35	2
5	Beverages	40	—	279	3	76	1	395	4
6	Tobacco	23	—	498	9	816	49	1,337	58
7	Cotton textiles	433	66	15,636	864	2,155	782	18,224	1,712
8	Wearing apparel (except foot wear) and made up textile goods	724	15	1,653	35	2,562	642	4,939	692
9	Textile Industries otherwise unclassified ...	594	20	5,399	154	2,898	491	8,891	665
10	Leather Products and foot wear	93	12	300	7	1,328	79	1,721	98

TABLE No. 1—(contd.)

	II Metals, Chemicals and Products thereof ...	252	2	1,892	43	1,662	41	3,806	86
1	Manufacture of metal mproducts otherwise unclassified.	155	2	606	27	1,401	40	2,162	69
2	Iron and Steel (Basic Manufacture)	32	—	329	3	107	—	468	3
3	Non-ferros Metals (Basic Manufacture) ...	—	—	27	—	1	—	28	-
4	Transport equipment	23	—	719	2	75	—	817	2
5	Electrical machinery apparatus, appliances and supplies	1	—	21	1	11	—	33	1
6	Machinery (other than Engineering machinery) including engineering work shop	7	—	37	2	10	—	54	2
7	Basic industrial chemicals, fertilisers and power Alcohol	9	—	16	—	4	1	29	1
8	Medical and Pharmaceutical Preparations ...	—	—	16	2	—	—	16	2
9	Manufacture of chemical products otherwise unclassified	25	—	121	6	53	—	199	6

TABLE No. 1—(contd.)

S. No.	Classification of Industries.	Employers Male	Employers Female	Employees Male	Employees Female	Independent workers Male	Independent workers Female	Total Male	Total Female
1	2	3	4	5	6	7	8	9	10
	III Processing and manufacture not elswhere specified	510	11	3,806	465	9,517	905	13,833	1,381
1	Manufacturing industries otherwise unclassified	237	1	866	7	2,373	43	3,476	51
2	Bricks, tiles and other structural clay products	56	3	805	236	535	143	1,396	381
3	Cement, Cement pipes and other cement products	5	—	47	—	19	1	71	1
4	Non-metallic mineral products	23	2	18	1	1,162	214	1,203	217
5	Rubber products	—	—	7	—	1	—	8	—
6	Wood and wood products other than furniture and fixture	120	5	1,106	162	5,296	500	6,522	667
7	Furniture and fixture	3	—	13	—	4	—	20	—
8	Paper and paper products	5	—	326	49	7	2	338	51
9	Printing and Allied Industries	61	—	618	11	120	2	799	13
	Grand Total of I, II & III	6,050	264	61,346	3,220	43,848	6,088	1,11,244	9,572

persons were employed in supervisory, technical and clerical capacity who were paid Rs. 80,000 as salaries. They consumed the materials worth Rs. 14 lakhs and the value of output stood at Rs. 28.8 lakhs.

Brass Cocks.

The manufacture of brass cocks started in Surat in 1911 on a very small scale. It was, however, during the post-war period (after 1944) that the major develpment of the industry took place. Since then it has made rapid progress. Not only that it meets the local demand but it also exports a substantial part of its products to Africa, Ceylon and the Middle Eastern countries.

At present (1957) there are about 18 major brass manufacturing units in Surat engaging about 200 persons. Besides these, there are about 100 small units which do casting and machining work on the job work system. Cocks are generally of four different types:—(i) spiral cam-system, (ii) screw-down type, (iii) taper-down type, and (iv) ball type with springs. But it is the third type that is mostly prepared in Surat.

The main raw material required is brass scrap which is purchased locally on rates varying between Rs. 140 and Rs. 155 per cwt. (1957). Machinery required is different for different processes such as grinding, threading, electroplating, etc. Some units, however, are thinking of installing multi-purpose automatic lathes to eliminate different processes on different machines. It is estimated that a sum of about Rs. 15,000 is required to start a cock manufacturing unit on a small scale. A few bigger units were reported to have invested even Rs. 50,000.

In view of the anticipated increase in internal demand for cocks due to increasing facilities of water supply system in the city as well as at other places in the district, the industry is likely to expand. At present the total production of brass cocks in Surat is estimated at Rs. 15 lakhs per annum.[1]

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[1] Report on Small Scale Engineering Industries in Surat; published in 1957 by the office of Development Commissioner, Small Scale Industries, Government of India.

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Brass, Copper and Aluminium.

The growth of this industry can be traced to the latter part of the 19th century. Its products were, however, not held in any great esteem during the last century; only its betel-nut-cutters were well-known for their sharpness and strength. During the last decade of the 19th century, one bigger unit the, Naranlala Metal Works, was started in Navsari and it manufactured domestic utensils of brass, copper, aluminium and german-silver. Mechanical processes were adopted in the unit round about 1920. Though the industry then was composed of only three units, it developed rapidly during the second world war. In 1953, the total number of factories registered under the Factories Act 1948 was five; of them one was located in Navsari, two in Bilimora, one in Pardi and one in Gandevi.

The statistics that follow relate to the factories for which information is available, namely, for eight factories in 1951, nine factories in 1952, four factories in 1953 and three factories in 1954.

Raw materials

The principal raw materials required are copper, which is brought in the form of ingots, slabs, billets and scrap alloyes of copper, zinc, tin, and copper, brass and stainless steel sheets. Chemicals and other auxiliaries consist of caustic soda, acids, salt and soda ash. For packing small utensils, paper and paper-boards and for articles of bigger size, wooden packing materials are used. The distribution of the main raw materials such as stainless steel and other accessories is controlled by Government. The following table shows the quantity and value of principal raw materials consumed for the years 1951, 1952 and 1954. (Table II). (The fuels, electricity and lubricants, etc. consumed by the industry in 1951, 1952 and 1954 were worth Rs. 95,785, Rs. 1,05,369 and Rs. 1,23,387 respectively.)

TABLE No. 2

Raw materials	Quantity (tons)			Value (Rs.)		
	1951	1952	1954	1951	1952	1954
Aluminium materials	79	81	75	1,82,273	2,05,403	1,87,293
Copper materials ...	20	47	67	62,153	1,45,150	2,10,425
Brass materials ..	238	156	226	7,74,130	3,74,526	5,53,236

The quantity of other basic materials used in 1951 and 1952 was 54 tons and 59 tons respectively and its value stood at Rs. 2,69,532 and Rs. 2,28,702 respectively. The total value of all the raw materials and work done by others in 1951 and 1952 was Rs. 12.86 lakhs and Rs. 10.92 lakhs respectively.

Equipment

The main equipment of the industry is the heating and melting furnaces, rolling mills, turning lathes, power presses, polishing machines, cutting machines and shaping machines, etc. The durability of this equipment varies from 15 to 25 years. All the units are not equipped with all the necessary machineries.

However Naranlala Metal Works is a vertically integrated unit and its total capital investment is stated to be Rs. 15 lakhs.

LARGE SCALE INDUSTRIES

Capital

The fixed and working capital was Rs. 4,90,377 and Rs. 6,70,364 respectively in 1951, Rs. 4,02,796 and Rs. 6,21,575 respectively in 1952 and Rs. 3,60,264 and Rs. 5,42,422 respectively in 1954. The total productive capital employed in the industry was, therefore, Rs. 11,60,741, Rs. 10,24,371 and Rs. 9,02,686 in 1951, 1952 and 1954 respectively.

Products

The principal products of the industry are domestic utensils of copper, brass, stainless steel and german-silver, lanterns, electric fans and other engineering equipment. The following table shows the quantities and the value of the principal products and by-products manufactured by the industry in 1951, 1952 and 1954.

TABLE No. 3

Products	Quantity (tons)			Value (Rs.)		
	1951	1952	1954	1951	1952	1954
Aluminium Products..	50	70	62	2,85,300	3,27,445	2,48,204
Copper Products ...	14	8	6	60,415	48,681	34,262
Brass products ..	203	205	290	11,47,741	9,88,614	12,72,894

Moreover, the total quantity of other types of products for 1951 and 1952 was 96 and 15 tons respectively and its value stood at Rs. 4,02,722 and Rs. 2,25,987 respectively.

Markets.

The products are marketed to Saurashtra, Punjab, Nagpur and Calcutta. The market for the products is expanding and possibilities for the export of lanterns, stoves and fans are said to exist. The products are sold both to wholesale agents and retailers. Some of the big factories maintain their own shops for selling their products.

Labour.

The total employment provided by the industry in 1951, 1952 and 1954 was 310, 276 and 271. This low level of employment was due to the fact that various processes have been split up and separately handled in the industry. The total wages, salaries and money value of other benefits for 1952 and 1954 came to Rs. 2,76,854 and Rs. 2,66,545 respectively.

Bricks and Roof Tiles.

Bricks and Roof Tiles.—The industry in the district is concentrated at Bilimora. The bricks of Bilimora are well-known and till recently were in great demand in Bombay. Since the establishment of brick factories in the vicinity of Bombay, the demand for Bilimora bricks has gone down and this resulted in

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Bricks and roo f Tiles.

curtailment of production by some factories and closure of a few units in the district. In 1953, out of fifteen factories eight were closed down and only seven were found working.

The Manglore tile industry of Bilimora is also famous for its products. The first factory was established at Bilimora in 1919 for manufacture of Manglore tiles and since then the industry has made rapid progress.

Out of seven factories working in 1953, particulars of three factories for the same year were as follows. The fixed and working capital was Rs. 4 lakhs and Rs. 1.5 lakhs respectively. They employed 288 workers and their wage-bill came to Rs. 96,000. 20 persons were employed in clerical and supervisory capacity and they were paid Rs. 19,400 as salaries. The total consumption of materials was worth Rs. 1 lakh and the total value of the output was estimated to be Rs. 3.25 lakhs.

Cement Processing.

Cement processing industry signifies the manufacture of Hume and Cement pipes and of floor tiles. The first factory of this kind was established in the district in 1931. Since then the number of factories has increased. In 1953 there were seven factories registered under the Factories Act 1948. Four of them were engaged in the manufacture of tiles and the rest manufactured pipes. Four were located in Surat, one in Navsari, one in Chalthan and one in Bulsar.

Raw materials

The raw materials required for the manufacture of floor tiles are cement, white cement, sand and colours such as green, black, blue, red, etc. The main chemical used is lissopo. The prices of these raw materials were stated to be as follows in first few months of 1958 : Rs. 170 per ton of cement, Rs. 600 per ton of white cement, Rs. 20 per brass of sand, Rs. 150 per one cwt. of foreign colours and Rs. 60 per one cwt. of indigenous colours.

Equipment

The important machines required in the manufacture of tiles are a hydraulic press and a hydraulic pump, polishing machines, planning machines and a colour-mixer. In 1950, these machines were valued at Rs. 40,000. Their durability is estimated to be 20 years These machines are manufactured in India and nearly Rs. 1,000 are annually required for their repair. The main processes are pressing, curing (in water), grinding and polishing and nearly 15 days are required for carrying out these processes.

Production and Marketing

The products of a tiles manufacturing unit are the various types of cement tiles which are estimated to be 20 in number. The products are marketed throughout Gujarat. Sometimes, the local Public Works Department and District Local Board also buy these products.

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Cement Processing

Statistical Data

The particulars of seven cement processing units for 1953 were as follows : The fixed and working capital was Rs. 5 lakhs and 8 lakhs respectively. They employed 239 workers and Rs. 106 lakhs were paid to them as wages. 27 persons were engaged in supervisory, technical and clerical capacity and they received Rs. 50,100 as salaries. The value of cement and other basic raw materials used was Rs. 2.8 lakhs and the products worth Rs. 9.5 lakhs were manufactured by these units.

Chemicals and Pharmaceuticals

The first factory for the manufacture of chemicals, namely, stearates and glycerine was started in the district in 1912 at Bilimora. This was followed by the starting of another factory at the same place in 1917 for the manufacture of textile auxiliaries. Since then though the industry has steadily developed, it was on a small scale basis. A step towards large scale production was taken in 1947 when Atul Products Ltd. was floated with a view to starting manufacture of dye-stuffs. The unit however started working in 1952. It is located at Parnera near Bulsar and has agreements with Lederle Laboratories of United States of America and the Imperial Chemical Industries. The Lederle Laboratories of United States of America established a factory at the same place for manufacture of anti-biotics and other pharmaceuticals.

Production.

The volume and varieties of production of Atul Products Ltd. for the year 1955 were as follows :

DYES—	
Direct Dyes	13,22,517 Lbs.
Acid Dyes	2,86,933 Lbs.
Sulphur Black	10,71,625 Lbs.
Developing Salts.	73,797 Lbs.
CHEMICALS—	
Sodium Thiesulphate	245 Lbs.
PHARMACEUTICALS—	
Sulfathiazole B. P.	88,267 Lbs.
Sulfadiazine U. S. P.	37,159 Lbs.
Aureomycin H. C. I.	442 Kgs.

Statistcal Data

In 1953, there were six factories engaged in the industry. The data about their fixed and working capital, raw materials consumed, persons employed, etc. was as follows. The fixed and working capital was Rs. 1.86 crores and Rs. 93.5 lakhs respectively. The number of workers employed was 544 and they received Rs. 3.5 lakhs as wages. 104 persons were employed in supervisory, technical and clerical capacity and they received Rs. 2.8 lakhs as salaries. The value of raw materials consumed came to Rs. 1 crore and the value of production was Rs. 1.6 crores.

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Cotton textile

Surat district has been producing fine quality of cotton fabrics for the last many generations. In the past, it was woven on hand-looms. With the advent of machinery and electric power, power-looms replaced handlooms to a large extent and later on, large composite mills were started in the district. The first composite mill to be established was the Gaekwad Mills at Bilimora which was started in 1921. Since then many new units were established. In 1953, there were six cotton textile mills in the district. Of them five were composite mills and the remaining one was a spinning mill. The mills are located in Surat, Navsari and Bilimora.

The statistics that follow relate to the factories for which information was available, namely, nine factories in 1951, eight in 1952, six in 1953 and seven in 1954.

Raw materials.

The main raw material for the cotton mill industry is cotton. It is supplied from various parts of Surat and Broach districts. The other raw materials include coal, hardcoke, chemicals such as lubricants, oil, grease and others and packing materials. The main packing materials are hessian cloth, '*Khajuri*' mats, bailing hoops and jute-twine. '*Khajuri*' mats are secured from local markets and the other packing materials from Bombay and other markets. The following table shows the quantity and value of principal raw materials consumed for the years 1951, 1952 and 1954.

TABLE No. 4

	Quantity			(Value (Rs.)		
	1951	1952	1954	1951	1952	1954
Cotton fibres	34,438	36,654 Bales	32,985 Bales	3,62,23,873	3,77,41,738	2,51,09,595
Other fibres	6,21,688	12,10,953 Lbs	15,40,444 Lbs	20,80,566	26,92,513	28,33,201
Wastes	—	—	9,080 Lbs	—	—	9,448
Yarns	1,28,710	1,08,430 Lbs	2,25 006	7,19,647	3,12,362	4,78,435

The total value of raw materials and work done by others for the years 1951 and 1952 was nearly Rs. 4.5 crores and Rs. 4.7 crores respectively. The value of fuels, electricity, lubricants, etc. consumed by the industry came to Rs. 21,16,145 in 1951, Rs. 26,78,936 in 1952 and Rs. 29,92,076 in 1954.

Equipment.

The main machinery required is Hooper Bale breaker, porcupine feeder, intermediate scutiches, fisher scutcher, carding engines, drawing frames, slubbing frames, winding machine, warping machine, sizing machine, drawing -in-machines, looms and others.

Capital.

The fixed and working capital in the industry was Rs. 1,43,03,929 and Rs. 3,18,91,286 respectively in 1951, Rs. 1,43,12,430 and Rs. 2,76,93,063 respectively in 1952 and Rs. 1,33,36,996 and Rs. 2,54,43,464 respectively in 1954. The total productive capital employed in the industry for the years 1951, 1952 and 1954 was therefore Rs. 4,61,95,215. Rs. 4,20,05,493 and Rs. 3,87,80,460 respectively.

Products.

All types of cloth from coarse to superfine qualities are manufactured. The following table shows the quantities and the value of products and by-products manufactured for the years 1951, 1952 and 1954.

TABLE No. 5

	Quantity (Rs.)			Value (Rs.)		
	1951	1952	1954	1951	1952	1954
Total yarn produced	1,23,15,230	1,40,52,004	1,25,77,000	—	—	—
Yarn for sale	12,08,881	16,99,625	21,64,160 Yds*	40,00,905	42,21,945	51,46,849
Woven Piece-goods	1,11,22,117	1,21,22,145	6,80,02,838	6,94,94,699	6,63,05,120	5,57,90,841
By-products	19,41,093	15,55,966	21,28,884	17,16,838	9,97,942	12,22,882

* In this year, woven piece-goods were measured in yards.

The total value of products, by-products and semi-finished products and work done for others was Rs. 7,47,39,876 in 1951 and Rs. 7,10,65,355 in 1952.

The products are mainly sold through wholesale agents and they serve the local, Bombay, Ahmedabad and Sholapur markets.

Labour.

The total employment provided by the industry in 1951, 1952 and 1954 was 8,600, 8,792 and 9,227 persons respectively. The value of total salaries, wages and money value of other benefits and privileges for the same years came to Rs. 1,42,32,830, Rs. 1,38,75,776 and Rs. 1,51,06,004 respectively.

Powerlooms.

In 1953, there were in the district 36 powerloom and handloom factories registered under the Factories Act of 1948, and were mostly concentrated in the urban places like Surat, Navsari, Bilimora, Bulsar, etc. Particulars about 28 factories for the year 1953 were as follows. The total fixed and working capital employed was Rs. 3.3 lakhs and Rs. 4.3 lakhs respectively. They employed 473 workers and their total wage-bill came to Rs. 1.5 lakhs. 25 persons were employed in supervisory and clerical capacity and they received Rs. 22,000 as salaries. Raw materials worth Rs. 7.5 lakhs were utilized and they produced cloth worth Rs. 8.8 lakhs. The industry was not organized properly

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and its position was reported to be bad. In the last few years therefore a large number of powerloom factories have switched over to the manufacture of silk and art-silk cloth.[1]

Dal making

The first mill was established at Bulsar in the second decade of the present century. In the next two decades, some ten more mills were established. In 1953, there were twelve mills in the district registered under the Factories Act, 1948. Of them, five were located at Madhi, four at Bulsar, and one each at Surat, Bilimora and Bardoli.

In the beginning the work was carried on by hand processes. With the advent of machinery, mechanized processes were introduced in the industry. With the growing demand for *tur* dal, the local crop of *tur* was found to be inadequate and *tur* was imported from Khandesh, Madhya Pradesh and Uttar Pradesh. In 1953, the local crop met only 25 per cent of the requirements of the industry. The main product is *dal* prepared from *tur*, *Adad*, *mag* and *val* and products are marketed not only in Surat district but also outside it. Bombay city is the principal market for its products. In additiion to *dal* making, most of the mills run rice polishing plants and carry on rice polishing.

Of the 12 registered mills in 1953, particulars about eight mills for the same year were as follows. The fixed and working capital was Rs. 5·3 lakhs and Rs. 11.6 lakhs respectively. They gave employment to 114 workers and distributed Rs. 57,000 as wages. 25 persons were employed in clerical and supervisory capacity and they received Rs. 26,000 as salaries. Different pulses worth Rs. 68.6 lakhs were utilized by these mills and the value of *dal* produced was Rs. 71.6 lakhs.

DYEING AND PRINTING

The dyeing and printing industry is one of the important small scale industries in Surat district engaging a total of over 900 persons. In Surat city there are 40 establishments engaged in the dyeing and printing works and provide employment to about 500 persons. Surat, Navsari, Bulsar, Bardoli, Jalalpore Chikhali, Mandvi, and Gandevi etc. are the main centres for this industry in the district.

Dyeing and Printing are essentially two different processes. Again, there are two types of dyeing processes, one involving the use of synthetic colour for dyeing while the other involvin fermented vegetable products. The latter is now outdated and in most of the establishments it is the former process that is in vogue.

In printing also there are three different types of processes. They are (1) Block Printing Process ; (2) Screen Printing Process ; (3) Machine Printing Process.

1 For details see section about Silk and Art-silk Industry.

In block printing process, printing is done with a wooden or metal block on which designs are engraved. The block designs generally fix well on cotton cloth but not on silk and art-silk cloth. In the screen printing process, a large screen of paper is used for printing purposes. The screen designs are placed on the cloth and then the colours are sprayed. The designs are thus printed on cloth in the required colours. This process is more effective on silk and art-silk cloth. The third type of process which involves the use of machine rollers is carried on in textile mills for large scale printing.

Raw materials

Raw materials which include, chiefly, colours and chemicals are generally purchased from the local markets and sometimes from Bombay and Ahmedabad. The tools and equipment required for the dyeing process are : buckets, tubes, gloves, brushes, furnace, etc., while those required for the printing process are : printing blocks, brushes, screens, spray gums, stands, etc. Most of them are purchased from the local markets. The equipment, especially the printing blocks have to be replaced often. Fashions change rapidly and so a particular design gets obsolete very soon. The block printers have, therefore, to incur considerable expenses in purchasing new blocks every now and then. Average initial investment in tools and equipment varies between Rs. 300 to Rs. 500 for a small size unit.

Markets

Printing is done in six colours at the maximum. The printing charges are about two rupees for one colour print on a piece of five yards with an extra charge of one rupee for each additional colour printed.

The market is generally local but orders often come from nearby villages. The block printers cater to individual customers while the screen printers also get big orders from cloth shops or the powerlooms which manufacture plain cloth.

Labour

Workers employed are mostly men. The dyeing process involves much physical strain. The colours are first prepared and the cloth is then stirred thoroughly in the hot solution of colours at a high temperature. Only well built males can undergo such a strain and hence no women workers are found employed for this work. The printing process, especially the block printing process, does not involve so much physical strain. The workers are employed on daily wages or on the piece wage system. They are paid between Rs. 2 to Rs. 3-8-0 per day. It is estimated that in one day a worker can print four sarees of five yards each in three to four colours.

With a view to imparting training in dyeing and printing to women belonging to lower middle class families a dyeing and printing school has been started in Surat since December

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1956, by the Department of Cottage Industries and Industrial Co-operatives. The trainees are paid a stipend at the rate of Rs. 25 per month during the one year course of training. One batch of 15 trainees has completed training at the school and the second batch of 15 trainees is under training at present. In order to settle the ex-trainees of the school, it has been proposed to organise their Industrial Co-operative Society at Surat. The ex-trainees have already collected an amount of Rs. 400 as initial share capital. The society would start functioning shortly.

Statistical data

Most of the units in the industry are very small and hence are not covered by the Factories Act, 1948. In 1953, only three units were covered by this Act. Two of them were located at Surat and one at Gandevi. The business was mainly confined to dyeing and printing of *sarees* and to some extent to dyeing of yarn. The data about these units for the year 1953 was as follows. The fixed and working capital was Rs. 8 lakhs and Rs. one lakh respectively. They employed 69 labourers and Rs. 52,600 were paid to them as wages. 29 more persons were also employed in these units and their annual salaries came to Rs. 36,000. Materials worth Rs. 2.8 lakhs were utilized and the value of total output was estimated at Rs. 4 lakhs.

General Engineering.

The first factory engaged in this type of manufacturing activity was started in 1923. However, there was very little progress till the outbreak of world war II (1939-45). During that war industry was put at an advantage because of the shrinkage of imports and the consequent heavy demand for indigenous products. A number of engineering workshops were therefore started. In 1953, there were more than 30 factories in the district registered under the Factories Act, 1948, engaged in foundry work and producing oil engines, turbine pumps, centrifugal pumps, jari-industry machinery, steel furniture, agricultural tools and implements, stoves, pressure lamps, and building materials etc.

The census of Manufacturing Industries returns for the general and electrical engineering industry for the year 1954 were as follows. The returns covered nine factories. The fixed and working capital employed was Rs. 5,30,413 and Rs. 4,80,774 respectively. The industry provided employment to 376 persons and they were paid Rs. 3.27,259 as wages, salaries and other benefits. The value of total fuels such as coal coke , fuel oils, other fuels, electricity and water utilized came to Rs. 43,751. The value of total raw materials utilized was Rs. 5,35,192. Products and by-products worth Rs. 10,72,505 were manufactured.

Ginning and pressing

Surat district has a considerable acreage of cotton growing area and that has facilitated the development of cotton ginning and pressing in the district. In the year 1876, as recorded in the old District Gazetteer, there were 18 cotton ginning and pressing factories in the district, worked by steam, with a total of

Ginning and Pressing

518 gins and 25 presses. Since then, there has been an appreciable increase in the number of factories. In 1953, there were 50 ginning and pressing factories, registered under the Factories Act of 1948. The industry was to some extent concentrated at Surat, Bardoli and Kosamba, with ten, seven and five units in each respectively : The remaining factories were distributed over most of the parts of the district.

The industry is seasonal in character and the units work from four to five months. Though they are organized both on a partnership and a co-operative basis, the present trend is towards the formation of co-operative ginning and pressing societies. The first ginning and pressing society in the district was registered in 1938 and was started at Baban near Bardoli. Since then the co-operative movement has appreciably spread and in 1957 there were 12 co-operative ginning and pressing socieities in the district.

Raw materials

The main raw material is raw cotton and it is supplied from various parts of the district. While factories run on proprietorship and partership lines get their supplies of raw cotton directly from farmers, co-operative factories get raw cotton mainly from sale societies. The first co-operative cotton sale society to be formed in the district was The Sonsak Group Co-operative Sale Society Ltd. which was registered in 1919. Since then the number of sale societies in the district has increased. In 1957, there were 72 sale socieities in the Surti Cotton zonetwhich covered Surat district, a part of Broach district and two talukas of West Khandesh district.

The main object of these societies is to advance crop cultivation loans to their members and to pool their cotton. The cotton so pooled in a common heap is got ginned and pressed mostly in the factory of a co-operative ginning and pressing society and then is sold either in their own name or in the name of the ginning and pressing society of that centre or in the name of the co-operative marketing union.

The other raw materials include hessian cloth, bailing hoops, coal and oil.

Equipment

There are only two processes, ginning i.e., separating seeds from raw cotton and pressing of cotton. The machinery required for these processess is single roller gins, a steam or oil engine, a boiler, a half-press, a finisher and pumping machines. Though the durability varies from machine to machine, on the whole they last for 30 to 40 years. The imports of these machines is costly and uncertain. Hence manufacturers who want to erec new units generally use second-hand machines.

The total capital required for a unit to work efficiently was stated to be nearly Rs. 5 lakhs in 1958.

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Production and Marketing

The final product and by-product of the industry are lint cotton and seeds respectively. The following table indicates the total crop position of the district since 1948.

TABLE No. 6

(One bale=400 lbs of lint cotton).

Year	Bales	Year	Bales
1948 ...	82,319	1953	84,925
1949	43,609	1954	1,18,024
1950	78,930	1955	1,33,188
1951	86,395	1956	1,77,351
1952	69,460	1957	1,03,356

The units in the district mainly serve the Bombay and Ahmedabad markets through the agency of commission agents and *dalals*. The final product is generally sold off every year, though sometimes stocks may accumulate and may have to be carried over to the next year.

One noteworthy feature about this industry from the view point of marketing is that the percentage of the entire crop sold by cooperative marketing unions has been on the increase since 1946. While it was 23.9 per cent in 1946, it increased to 50.2 per cent in 1955 and 59.5 per cent in 1957.

Labour

Workers employed are mostly unskilled. The technical staff however, includes engineers, fitters, boiler attendants, etc. Labourers are recruited on daily wage basis for ginning and on contract basis for pressing.

In 1955, the rates of wages for various categories of labour were as follows. Rs. 75 to Rs. 90 per month for skilled labourers; Rs. 50 to Rs. 70 per month for semi-skilled labourers and Rs. 1-4-0 to Rs. 1-12-0 per day for unskilled labourers. Working conditions were reported to be fair and labourers worked for eight hours per day.

Statistical data

In 1953, there were 50 ginning and pressing factories registered under the Factories Act, 1948. Particulars for 30 factories for the same year were as follows. The fixed and working capital employed was Rs. 34 lakhs and Rs. 75.8 lakhs respectively. They gave employment to 2,800 workers of whom nearly one-half were female workers. Their total wage-bill came to Rs. 2.6 lakhs. 275 persons were emoplyed in supervisory, technical and clerical capacity and they were paid Rs. 1.5 lakhs as salary. Cotton worth Rs. 3.3 crores was ginned and pressed in these factories.

Industries. LARGE SCALE INDUSTRIES Association

The industry has what is known as The Surat District Cotton Dealers Association. It is composed of the representatives of sellers and buyers and its main object is to govern the trade practices regarding the details of weighment, labour charges, delivery conditions, payment procedures, etc.

Jari (Gold and Silver thread) Industry

Surat city is the largest jari producing centre in the whole of India. The industry has been firmly established here by families of skilled artisans among whom the craftsmanship and the exquisite dexterity of art have passed on from generation to generation. The artisans have moved with the times and have adopted modern techniques of production wherever necessary, discarding the old methods and patterns of the past. It is exactly for this reason that the industry has survived through adverse conditions of the past.

Historical back ground

The origin of the industry can be traced to ancient times. However, it was during the Moghul period that the industry received great help and encouragement. It received patronage of the Moghul Emperors who were fond of pomp and pageantry. At that time Surat and Banaras were the two main centres of the industry in the whole of India.

The old Surat District Gazetteer published in 1877 says:—"Surat still retains its reputation for embroidered work. The demand for silk embroidery, with gold and silver thread, has of late years revived. The workmen, or *Jardost* who embroider with gold and silver thread, are all *Musalmans*. But Hindu women, chiefly of the *wania*, *Brahman*, and other high castes, work with silk thread on a silk ground. The consumers of embroidered articles are chiefly the Parsi population of Surat and Bombay".

"The preparation of the gold and silver thread and laces used for embroidery is a separate industry. The manufacturers are Hindus, chiefly of the *Khatri* caste. Surat made gold and silver thread hold a high place in the market."

Mr. Forbes Watson, Reporter on the Products of India to the Secretary of State for India in Council observed in his book 'The Textile Manufactures of India' published in 1866 that at the Dublin Exhibition the chief exhibitors of the Irish Polipins in which gold and silver thread was used, had to change their specimens on account of their becoming tarnished whereas the metal fabrics from India on the same occasion, retained their colour and lustre throughout.

Foreign Competition in the Past.

It was only in the second half of the 19th century that the machine made foreign *Jari* goods began to compete with Indian goods. The competition became all the more severe in the early part of the 20th centry. The foreign *Jari* goods-especially from France-which were cheaper in price began to flow in to India with the result that the Surat Jari Industry received a set-back.

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Fortunately, the competition did not last long. The first world war caused a cessation of imports which proved to be an incentive to the indigenous products for which demand began to increase steadily. The Tariff Board constituted in 1930 recommended the grant of protective duty of 50 per cent advalorem to the *jari* industry till the year 1940. Government raised the import duty on silver thread and allied products from 30 per cent to 38 per cent in 1930. A few machines were also imported to improve our technique of production. All these measure served the purpose for which they were intended and at the end of the second world war the industry was once again firmly stabilized. In fact, the decade between 1940 and 1950 was the peak period for the industry. Radical changes took place both in the methods and in the technique of production. Not only did the industry capture the domestic market but it also began to export its products to countries such as Africa, Burma, Ceylon, Malaya, and the Middle East countries. The use of electric power, new techniques and modern processes of manufacture resulted in a thorough re-oraginisation of the industry. The manufacture of imitation *jari* which had started in Surat after 1918 began to increase rapidly replacing that of real *jari*. Slowly but steadily the production of real jari diminished and that of imitation went on increasing. It is estimated that at present the production of real *jari* and imitation *jari* constitute about 20 per cent and 80 per cent respectively of total production. In fact Surat may be said to be the only centre which produces imitation *jari* in India.

The present position

The loss of the Pakistan market coupled with the decline in the local demand due to the disappearance of State rulers, Nawabs, Zamindars, etc. who were the principal buyers of *Jari* goods, the change in the dress habits of the people in general and the rise in prices of such raw materials as gold and silver have all affected the industry with the result that production has declined, quality has deteriorated and business in general has gone down. Perturbed by such unhealthy symtoms the Government of India appointed a committee called the Jari Industry Inquiry Committee in 1957 under the chairmanship of Shri N. Majumdar, the Industrial Adviser, (Texitile Production) to the Government of India. The terms of reference of the committee were comprehensive enough to cover all the aspects of the industry.

Inspite of all this, Surat even now remains the most important centre wherein the families of artisans still excel in their hereditarily specialised art and craftsmanship.

Organisation and structure

The industry is essentially a small scale industry where use of power on a large scale is ruled out. Moreover, almost all the units are dependent for one or more processes on out side job work done by *Akhadedars*-the contract workers who execute the work of wire drawing, winding or gilding on behalf of the merchants. They possess their own machines and most

of them execute the work with the help of their family members at home. Some of them employ outside workers who are paid daily wages ranging from Rs. 2 to Rs. 6 a day. The *Akhadedars* get the raw materials from the merchants, carry out the work and return the finished products to the merchants. Generally they work on commission basis. Some *Jari* merchants, however, get the whole proccess executed by their paid workers in their own factories.

The memorandum submitted by the Surat Jari Development Board to the Jari Industry Inquiry Committee in 1958 clamed that there were about 800 *Jari* Merchants, 1,000 *Akhadedars* and about 25,000 workers engaged in the industry. The numbers of workers, of course, included both the full time as well as the part time workers. The 1951 census, however, put the total of employers, employees and independent workers in this industry at 6,756.

Processes

The following are the different processes involved in the manufacture of *Jari* thread: (i) preparation of bar, (ii) drawing of wire-coarse, medium, fine and superfine, (iii) gilding, (iv) flattening the wire (larnetta), (v) dyeing of raw silk, (vi) winding of larnetta on silk, art silk or cotton thread, (vii) winding of Jari thread (*kasab*) on bobbins, (viii) reeling and (ix) packing.

All these processess are not carried out in one establishment. Different units specialies in different processes. Some of the processes are so intricate that only thoroughly trained artisans can execute them. The whole process of manufacturing Jari consists of drawing very fine silver wire from silver bars with the help of diamond dies. The finest wire is as fine as human hair. The wire is flattened by a special process to acquire shine, is then spun on silk, art silk or cotton yarn in such a way as to completely cover the thread. For producing gold *Jari*, known as real *Jari*, this silver thread is electroplated with gold. Due to rise in prices of gold and silver and the consequent inability of customers to purchase real *Jari* goods, copper wire is more frequently used in their place and it is either gilded with brass or dyed with gold coloured lacquer varnish. Such a product known as imitation Jari is cheap, is more in demand and has therefore, assumed a dominant position in the industry.

Raw materials

Raw materials required for Jari work are: gold, silver, copper, raw silk artificial silk yarn, cotton yarn, cloth, chemicals such as sulphuric acid, potassium cynide, etc., Most of the materials are very costly and some of them are not easily available. The prices of gold and silver for example, are much higher in India as compared to those in France, England or the United States of America. Manufacturers complained that due to inadequete supply of Japanese silk and chinese silk which are best suited to the requirements of the industry, they had to resort to indigenous silk which they claim, is not quite suitable for the process.

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The annual consumption of raw materials as estimated by the Surat Jari Development Board in 1958 is as follows:—

Raw Material	Value (Rs.)
Gold	48,00,000
Silver	2,16,00,000
Copper	60,00,000
Raw silk	40,00,000
Art silk yarn	18,00,000
Cotton yarn	21,60,000
Cloth (including velvet)	9,00,000
Chemicals	3,00,000
Diamond and Ruby Dies	1,00,000
Total Rs...	3,86,60,000

Tools and Equipment

Wire drawing machines, winding, machines, die manufacturing, machines, gilding machines, tiki, (spangles) machines, embroidery machines, etc. are some of the important machines required for *Jari* manufacturing work. Most of them are locally made. For every process there is a typical machinery which is specially manufactured in the local engineering units. Some of the spare parts are, however, imported from foreign countires. The machines generally last for 20 years. It is estimated that a complete unit will have to spend about one lakh of rupees in purchasing all the machines required for the various processes.

Production and Marketing

The total annual production of the industry is estimated at about Rs. 8 crores, at present as detailed below [1] :—

Name.	Value in Rs.
Real gold thread	1,50,00,000
Imitation gold thread	2,70,00,000
Stars, Spangles, Salma, etc.	2,00,00,000
Gota, Thappa,Kinari	1,50,00,000
Fit, Zic.	10,00,000
Laces and borders	40,00,000
Total Rs.	8,20,00,000

It is estimated that nearly 90 per cent of the total production is consumed in our own country while 10 per cent is exported to Iran, Iraq, East Africa, Ceylon, Burma, Indonesia, etc. The chief consuming areas in our own country are Madras, Mysore, Rajasthan, East Punjab and West Bengal. The *Jari* thread is extensively used in South Indian Handloom industry.

1. Figures taken from the Memorandum submitted (in 1958) by the Surat Jari Development Board to the Jari Industry Inquiry Committee

A large number of artisans gifted with hereditary knowledge and skilled craftsmanship are mainly responsible for the existence and expansion of the Jari industry in Surat. The persons engaged in this industry come, mainly, from Gola (Rana), Khatri and Patider communities. The Old District Gazetteer (1877) mentions : "....the manufacturers of gold and silver thread are Hindus, chiefly of the Khatri caste, while the weavers (of brocade or kinkhab) belong chiefly to Kanbi (Patidar) caste. But of late years, some Golas (Hindus of the rice-pounding caste) have been taught the craft".[1] The number of Golas engaged in this industry has considerably increased since the time the Old Gazetteer was written.

The Surat Jari Development Board estimated that in 1957-58 about 25,000 persons including men, women as well as children of tender age were fully or partially dependent on the Jari industry for their means of livelihood. It is however difffficult to ascertain the correctness of the above estimate in view of the fact that the industry is very highly decentralised and most of the persons engaged therein are rather reluctant to give correct information.

Co-operation.

There are three organisations in the Jari industry in Surat, viz., (1) Jari Goods Producers' Co-operative Society, (2) Surat Jari Merchants' Association and (3) Surat Jari Development Board.

Jari Goods Producers' Co-operative Society:— The acute shortage of raw materials which began to affect the industry during the Second World War made the Jari producers to combine on co-operative lines. As a result the Surat Jari Goods Producers Co-operative Society, the first and the only one of its kind in the industry, was established on 6th December, 1944 with a membership of 61 promoters and with a share capital of Rs. 14,780. The society now (1957-58) has a membership of 511 and a share capital of Rs. 89,280. It helps its members by procuring for them in bulk such raw materials as copper wires, raw silk, art silk, cotton yarn, chemicals, etc. It has also decided to start a wire rolling mill in the Industrial Estate of Udhna, the construction of which is nearing completion, The society has for this purpose already purchased a plot extending to about 10,000 square yards at a cost of Rs. 30,000 in the Udhna Udhyognagar and the required machinery has also been purchased. The installed capacity of the rolling mill is drawing of 10 tons of copper wire bars up to ⅛" thick wires. It is expected that the mill will be able to meet the requirements of the *Jari* industry as far as the supply of copper wires (of ⅛" thick) is concerned.

Surat Jari Merchants' Association:—Surat Jari Merchants' Association or *Surat Jari Vyapari Mandal* as it is locally known is

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a representative organisation of the Jari merchants and manufacturers. Established in 1944, it was registered under the Indian Trade Unions Act (1926) in 1955 as a recognized body of employers. The Association provides legal guidance to its members, endeavours to solve labour problems, arranges for the supply of raw materials to its members and renders good service as a representative body when dealing with Government. It has, at present (1957-58), a membership of 200 *Jari* merchants and manufacturers.

Surat Jari Development Board:—The Board was constituted in 1954 with a view to evolve means to study the overall problems of the industry and bring about an all-round development of the industry as a whole. Since its inception it has tried to establish healthy relations between employers and employees by negotiation and other peaceful methods. It urged the Government to assist the development of the industry and to appoint a committee to investigate in to the problems of the industry and to suggest measure for their solution. Accordingly, the Government appointed a seven member committee called The *Jari* Industry Inquiry Committee in 1957 under the chairmanship of Shri N. Majumdar, the Industrial Adviser, (Textile, Production,) to the Government of India.

Silk and Art-silk Industry.

Like cotton weaving, silk weaving has been carried on in Surat for the last many centuries. '*Kinkhab*' cloth prepared at Surat was well-known in Mughal times and was used not only in Mughal Darbars but also used to be exported to other countries. The old Surat District Gazetteer (1877), records thus :—"considerable quantities of silk goods are manufactured in Surat. The classes engaged in this branch of trade are Musalmans, Parsis, and of Hindus, *Kanbis*, *Khatris* and *Khamars*. *Masru* and *Elaicha*, two varieties of mixed cotton and silk cloth formerly much used for coats by the men of all well to do classes are now out of fashion ; and their manufacture has alomost entirely ceased. On the other hand, the demand for smooth polished silk cloth. known as gaji, now commonly made up in to bodices and worn even by the poorer classes, is on the increase". Since then, the industry has gone through many ups and downs. But inspite of all these, it has survived and has contributed to the industrial development of the district.

Growth.

Before the twenties of the present century, the industry consisted of handlooms and its products were mainly of pure silk. The introduction of electricity in the beginning of the twenties changed the character of industry and led to significant changes in the technique of production. This in turn led the industry to adopt pit looms, throw shuttle looms, hetersley looms and power looms In the intitial stages, all the powerlooms were working on silk, spun silk and superior cotton yarn. During the second world war, however, imports

of yarn were stopped and sufficient indigenous yarn was not available with the result that the industry had to pass through critical times. In the post-war period, the weavers turned towards synthetic yarns like art-silk, staple, etc., From which they began to manufacture numerous varieties of art slik cloth such as linen, georgette, taffeta, boski, satin, etc., At present, nearly 70 per cent of powerlooms are being worked to produce art-silk fabrics and the position as regards the looms in the district is as follows :—

Handloom (Throw and Fly shuttle)..	6,500
Powerloom art-silk	19,000
Powerloom cotton	1,000
Hattersley looms	800

Location

The working centres in the district are Surat city, Bulsar, Chikhali, Mandvi, Gandevi, Jalalpore, Bardoli and Nana Varachha. Of them, Surat is the most important centre. The total number of powerlooms in Surat city was 4,100 in 1941 ; 5,100 in 1946 ; 10,000 in 1951 and 15,000 in 1955. By the end of 1957, there were nearly 16,000 powerlooms working on art-silk in Surat city. The break-up of factories according to the range of loomage was as follows—

Range		No. of factories	Looms (approximate)
1 to 4 looms	..	600	2,000
5 to 9 looms	..	550	4,000
10 to 24 looms	..	250	5,000
25 and above ..	..	60	5,000

Since March 1956, Government has imposed a ban on the further expansion of the art-silk industry and this has, it was reported, checked the growth of the industry.

Raw materials

The raw materials for the industry are cotton, silk yarn, artificial silk and chemicals. While cotton yarn is available from Bombay and Ahmedabad, silk yarn is mainly imported from Italy, Japan, China and England. Indigenous yarn is reported to be not of proper quality in count, strength, evenness, price, weight, etc. The total consumption of yarn of different qualities in Surat is estimated at the value of about Rs. 8 crores and the requirement of the industry of art-silk yarn is estimated at 4 lbs. per loom per shift per day.

Powerlooms are imported from Bombay and Foreign countries. A powerloom of British made costs about Rs. 1,600 while an indigenous one costs about Rs. 1,200. Handlooms are locally manufactured and costs about Rs. 200 to Rs. 225 including automatic take-up attachment etc.

Equipment

On the weaving side, there have not been many changes in recent years. On the preparatory side, however, significant changes have taken place in the sizing section. Instead of single thread sizing, several factories have now put in slasher sizing machines.

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In the matter of looms and other equipment the weaver has for the most part now succeeded in dispensing with imports from foreign countries. Looms are generally bought second-hand from the composite mills and suitable changes are then made in them. Moreover, all the spare parts and most of the accessories and preparatory machinery are also manufactured locally.

Processes

The technical processes involved are dyeing, winding, doubling or twisting, warping. beaming, sizing, weaving and finishing. In Surat city, six processing plants are working and one more is being set up by the Surat Vankar Sahakari Sangh Ltd. But these processing facilities are not adequate. Consequently, a considerable portion of the production is either sent to Bombay and other places for further processing or is sold at this centre in an unfinished condition. The charges for different processes for different varieties of cloth per yard in 1955 were as follows :—

	Rs. As. Ps.
Boski bleach curi cream (colour for process and dyeing)	0—1—0
Bleached Boski for cream colour 30" and above	0—1—3
Designed art-silk shirting for processing ..	0—0—9
Art staple for cotton cloth dyeing	
(1) Light colour	0—1—0
(2) Medium colour	0—2—6
(3) Dark colour	0—4—6
Washed art-silk linen for processing ..	0—1—6
Voil Georgette assorted colour dark and light for dyeing	0—2—0
Voil Georgette assorted colour medium ..	0—2—6
Voil Georgette assorted colour dark ..	0—3—0

Investment

The investment per loom on an average is estimated at Rs. 3,500 inclusive of investment on land, machinery, and other equipment. On this basis, it is estimated that the total capital investment in Surat city is nearly Rs. 5.5 crores.

The main fabrics manufactured are bosky, satin, grey dull linen, dull staple, shioze, chiffon georgette, crepe, linen, panama, bush and chokda. The rated capacity is stated to be nearly 25 yards per loom per shift per day and the annual production in Surat city is estimated to be 150 million yards. The entire production is usually sold out within a month. The main markets are Delhi, Amritsar, Africa, Middle-East, Indonesia, Hongkong, Burma and Ceylon. The products are generally sold through commission agents and payment is received nearly one month after sale.

Production and Marketing.

The selling prices (maximum and minimum) of the major types of fabrics during 1954, 1955, 1956 and 1957 were as follows:

TABLE No. 7

THE STATEMENT SHOWING THE SETTING PRICES OF MAJOR TYPES OF FABRICS CLUSING 1954, 1955, 1956 AND 1957

Sr. No.	Name of the quality		1954		1955		1956		1957	
			Maximum	Minimum	Maximum	Mimimum	Maximum	Minimum	Maximum	Minimum
			Rs.As.Ps.	Rs.As.Ps.	Rs.As.Ps.	Rs.As.Ps.	Rs.As.Ps.	Rs.As.Ps.	Rs.As.Ps.	Rs.As.Ps.
1	Grey Linen	27"	0-11-0	0- 9-6	0-10-9	0- 9-0	0-11-0	0- 9-6	0-10-0	0- 7-6
2	Crepe	37"	1- 5-0	1- 3-0	1- 4-0	1- 2-6	1- 5-0	1- 3-0	1- 2-0	0-15-6
3	Tafetto	33"	1- 1-0	1- 1-0	1- 2-0	1- 0-6	1- 3-0	1 -1-0	1- 1-0	0-13-6
4	Voil	45"	0-15-0	0- 14-6	0-14-0	0-13-0	0-14-0	0-13-0	0-13-0	0-10-6
5	Georgette	46"	1- 7-0	1- 5-0	1- 6-0	1- 4-0	1 -6-0	1- 4-0	1- 3-0	0-15-6

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Labour

According to the memorandum submitted to the Tariff Commission in 1958 by The Surat Chamber of Commerce, Surat, nearly 40,000 workers were employed in this industry at Surat. In units which were not registered, the worker got from Rs. 60 to Rs. 90 per month and those working on piece-rate basis got from Rs. 75 to Rs. 100 per month. The minimum pay was Rs. 26 in factories running under the Factories Act or Bombay Industrial Relations Act. Only big factories which were few gave bonus to workers. It came to one or two months' pay or a lump sum agreed upon by employers and enployees.

Labourers were employed full time as well as part-time. Khatris, Mahomedans, Harijans and other backward class people were engaged in this industry. Most of labourers were illiterate and spendthrift.

It is estimated that nearly 42 per cent of the units possessed less than four or four powerlooms and nearly 75 per cent of the units possessed less than nine or nine looms. In most of the small units which constituted the bulk of the industry, the family members of the weavers themselves worked. It is also estimated that about 160 factories employed more than 20 workers and in about 20 factories, the strength of the labour force was more than 100.

Associations

There were four associations in the industry, viz. The Surat Weaving Association, The Surat Weavers' Co-operative Producers' Society Ltd., The Surat Vankar Sahakari Sangh Ltd. and The Surat Art-silk Cloth Manufacturers' Association Ltd. Their dates of establishment were 1936, 1944, 1948 and 1955 respectively. In order to co-ordinate the activities of these associations, a co-ordinating committee, viz. The Surat Weaving Industry, Central Development Committee was formed in 1957. The activities of these associations were confined to the promotion of the industry and to the solution of problems relating to raw materials, labour, excise duty, import permits and other relevant matters. The Surat Weavers' Co-operative Producers' Society Ltd. had also a dyeing, bleaching and finishing plant and The Surat Vankar Sahakari Sangh Ltd. had undertaken the work of establishing a modern well-equipped processing house. The construction of this new processing plant, it is stated, will considerably add to the existing processing facilities in the district.

Sugar and Gur Industry

The sugar industry in the district is a growing industry. At presnt (1958) there is only one unit in existence viz., Shri Khedut Sahakari Khand Udyog Mandli Ltd. The unit was registered in 1955 and is organized on co-operative lines. It is located in the village Baben (near Bardoli station) in Bardoli taluka. After the formation of the society a committee was appointed

to visit some of the sugar factories, to see their working and management for determining the size of the proposed factory. After necessary visits and inspection, the Committee opined that it was in the interests of the sugarcane cultivators-cum-members to start a factory with a minimum crushing capacity of 800 to 1000 tons per day. Accordingly, the machinery was installed. The work of the society was facilitated because the Government of Bombay contributed Rs. 10 lakhs to its share capital and the Industrial Finance corporation approved the society's proposal of loans for 47½ lakhs. The factory started working in 1956.

Raw materials

Sugarcane, which is the main raw material, is supplied to the factory from all villages, situated within a radius of ten miles from the factory and some 42 other villages. The other raw materials are coal, firewood, chemicals and gunny bags. In 1956-57, the factory spent Rs. 10,33,503-4 nP. for sowing, harvesting etc., and purchase of sugarcane, Rs. 1,26,433.44 nP. for sugarcane cess, Rs. 57,969.72 nP. as fuel charges, Rs. 14,549.58 nP. for lubricants and Rs. 33,642.66 nP. for chemicals.

Equipment

The machinery, both for boiling and milling, was imported from West Germany and its durability is estimated to be 20 years. The process of production adopted is the double sulphitation process. The annual crushing capacity of the unit is 80,000 tons and the total investment is stated nearly at Rs. one crore.

Production and marketing

The factory produces all types of sugar except of A quality and its price-structure during the first half of the year 1958 was as follows :-

Type		Rs.
B	..	110 per bag of 2¾ mounds (Bengali)
C	..	108 " " " " "
D	..	106 " " " " "
E	..	105 " " " " "
F	..	104 " " " " "

The by-products are molasses and bagasse. While baggase is used in the factory itself, molasses are sold out to chemical works.

The products of the factory are sold directly to merchants and the minimum quantity for sale is 40 bags. Surat district is the main market for its products and it consumes nearly 80 to 90 per cent of the total products.

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Association

The total employment during the first half of 1958 was 200. Of them 150 were wage-earners and 50 were salary-earners. Only 1/3 of each category were permanent employees.

The factory is a member of Bombay State Co-operative Sugar Factories Association (Poona) which was formed in 1955. The main activities of the Association are to make representations to Government and to take necessary steps for smooth and continuous development of the industry.

Gur Industry

Gur industry in the district is very old and is mostly carried on cottage scale. In 1953, there were three units in the district, which were governed by the Factories Act, 1948. Two of them were run on co-operative lines. Particulars about the two factorics for 1953 were as follows. Fixed and working capital was Rs. 90,000 and Rs, 43,000 respectively. They employed, 132 workers who received Rs. 12,000 as wages and 14 persons in other capacities who were paid Rs. 12,200 as salaries. The value of sugarcane and other basic materials consumed was Rs. one lakh and the value of total production was Rs. 1.5 lakhs.

Vegetable Oil Industries

Although the quantity of oilseeds grown in the district is not as large as in some other districts, the oilseeds crushing industry is fairly well developed in the district. Oil extraction has been done by oil mills, expeller mills and oil ghanis. In 1953, there were 11 oil mills in the district, registered under the Factories Act, 1948. Of them, three were located in Surat city, four in Bilimora, one in Navsari, one in Bulsar, one in Madhi and one in Kosamba.

The statistics that follow relate to the factories for which information is available, viz., 8 in 1951, 1952 and 1954 and 9 in 1955.

Raw-Materials

The main raw materials consumed are coconut, groundnut, castor seed and other oil seeds. The local crop of oil seeds is not sufficient. Hence additional seeds are imported from adjoining districts. The seeds are purchased from cultivators as well as merchants. Some of the manufactures, however, indulge in forward buying of seeds. Electricity, coal and fuel oil are used for power and fuel. The total value of fuels, electricity, lubricants, etc., consumed was Rs. 2,35,325 in 1951, Rs. 1,81,443 in 1952, Rs. 1,39,883 in 1954 and Rs. 4,88,861 in 1955. The following table indicates the quantity and value of principal raw materials consumed foı the years 1951 and 1952.

TABLE No. 8

Raw material consumed	Quantity (Tons) 1951	Quantity (Tons) 1952	Value (Rs.) 1951	Value (Rs.) 1952
Cotton seed	2,795	319	10,33,807	1,08,885
Coconut	—	—	—	—
Ground-nut	2,701	3,974	22,64,683	23,79,121
Other materials ...	10,738	10,724	98,12,816	71,29,818

The consumption of raw material for the year 1954 was as follows:—

TABLE No. 9

Raw materials consumed	Quantity (Tons)	Value (Rs.)
Cotton seed	616	1,52,843
Castor seed	5,338	25,13,760
Sesame seed	15	9,943
Groundnuts (unshelled)	5,379	25,05,979
Groundnuts (kernel)	1,746	11,00,233
Mowrah seeds	763	3,55,328
Other oil seeds...	548	2,64,294

Equipment

The main machinery required is decorticater for segregation, expellers for crushing and filter machines and filter pump for oil purification. Formerly these machines were imported but now indigenous machines are used.

Capital

The minimum total investment required for a unit with one expeller, one decorticater, one filtering pump, one oil machine and other necessary items was stated to be Rs. 1 to 1½ lakhs. It was also reported that a unit of this size would require seven labourers for its efficient working.

The total productive capital employed in the industry was Rs. 36,81,729 in 1951 ; Rs. 27,51,097 in 1952 ; Rs. 24,83,478 in 1954 and Rs. 35,97,950 in 1955.

Production and marketing

The main products of the industry are various kinds of oil and oil-cakes. The following table indicates the quantity and value of products and by-products manufactured during the years 1951 and 1952.

TABLE No. 10

Products and by-Products	Quantity (Tons) 1951	1952	Value (Rs.) 1951	1952
Cotton seed oil ...	424	—	8,37,853	—
Cotton seed cake ..	1,779	243	4,08,180	51,549
Coconut oil	—	—	—	—
Coconut cake	—	—	—	—
Groundnut oil ...	1,076	1,365	21,87,562	21,99,033
Groundnut cake ...	1,616	2,022	3,29,397	3,30,952
Other oils	4,193	4,451	83,73,586	72,36,174
Other cakes	6,228	6,161	13,71,196	12,24,458

The total value of products in 1955 came to Rs. 1,28,15,746. The products are sold mainly through wholesale agents Surat district consumes a large percentage of the total products.

Employment

The industry provided employment to 594 persons in 1951, 466 in 1952, 339 in 1954 and 528 in 1955 and the total value

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of salaries, wages and benefits etc., paid to them came to Rs. 4,24,712 in 1951, Rs. 3,28,521 in 1952, Rs. 2,42,865 in 1954 and Rs. 3,77,878 in 1955.

The rates of wages including allowances in 1955 were Rs. 40 to 50 per month for an unskilled worker, Rs. 43 to Rs. 54 per month for semi-skilled labourers and Rs. 50 to Rs. 62½ per month for skilled labourers. Conditions of work were fair for the same year.

Association

The industry had one association, viz., The Surat Oil Expeller Association. It came into existence in the post- partition period and is a price-fixing association.

OTHER INDUSTRIES

(1) Ice and Aerated waters.

The first factory in the industry was started in 1880. With the increasing popularity of the products, the industry developed and in 1953 there were eight factories registered under the Factories Act, 1948. Of them, six were located in Surat, one in Navsari and one in Bilimora.

Out of eight factories, particulars about six units for the year 1953 were as follows. The fixed and working capital employed was Rs. 3.6 lakhs. They employed 70 workers who received Rs. 52,000 as wages. 14 persons were employed in supervisory and clerical capacity and they were paid Rs. 14,500 as salaries. Materials valued at Rs. 2.4 lakhs was used by the factories and the output of ice and aerated waters was valued at Rs. 3.6 lakhs.

(2) Printing presses.

In 1953 there were 15 printing presses registered under the Factories Act, 1948 and particulars regarding 11 of them were as follows. The total fixed and working capital invested by them was Rs. 6.6 lakhs and Rs. 4.6 lakhs respectively; 232 workers and 63 supervisory and clerical staff were employed by them and they received Rs. 2 lakhs and Rs. 77,900 as wages and salaries respectively. Paper, ink etc., worth Rs. 2 lakhs were utilized and the value of publications including that of job work done was estimated at Rs. 3.75 lakhs. The larger presses which published newspapers or periodicals sold their publications below the cost of production and usually recovered the loss from income from advertisement or from grants procured from charitable and other trusts.

(3) Saw mills.

Surat district has got good forest areas on its eastern border and different varieties of wood, therefore, are available in sufficient quantities. Moreover, wood is also brought from outside through the ports of Bulsar, Bilimora and Navsari. This wood is cut to suitable lengths to facilitate its transport. It is these factors which have given impetus to the saw milling industry in the district.

The first saw mill was established at Bilimora in 1924. Since then the number of mills has increased. In 1953 nine saw mills

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were registered under the Factories Act, 1948, eight in Bilimora and one in Navsari. The industry was thus concentrated at Bilimora and this was due to availability of rail and river transport facilities for movement of wood from forests and other places.

Particulars in respect of the eight factories for 1953 were as follows. The fixed and working capital employed was Rs. 11.9 lakhs and Rs. 6.8 lakhs respectively. The number of workers employed was 129 and they received Rs. 73,300 as wages. 29 persons were employed in supervisory and clerical capacity and they were paid Rs. 27,800 as salaries. Wood of the value of Rs. 13 lakhs was used and the value of output was estimated at Rs. 15 lakhs.

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Brick manufacturing.

Brick manufacturing is one of the important seasonal industries in the district. The season lasts for about eight months in a year, excluding the monsoon months. Labourers employed in this industry are generally illiterate and during the off season they engage themselves in agriculture or in spinning and weaving. It is estimated that about 3,000 workers are engaged in this industry. The main centres are Surat, Bardoli, Kadod, Kosama, Mangrol, Bilimora, Bulsar and Pardi.

The raw materials required for brick manufacturing are earth, hard coke and half burnt coke, dung, etc. Bricks are prepared out of these and then kept in a kiln where they are burnt for a few days and then taken out. It is estimated that a unit of eighteen labourers can prepare about 60,000 bricks per month. They are sold either locally or in the surrounding areas. The prevailing (1957) prices in the district are Rs. 50 to Rs. 65 per thousand.

The brick manufacturing concerns are owned by contractors. The number of workers engaged in each concern varies between 10 to 100 according to the capacity of the kiln and the pressure of the demand. Workers are paid wages from Rs. 1-8-0 to Rs. 3 per day.

One co-operative society of this industry has been recently organised at Mota Pondha in Dharampur taluka but it has not started functioning as yet. Efforts are also being made to organise such a society at Valzar in Bansda taluka.

Cane and bamboo work

In almost all the taluka centres of the district a few families are found engaged in cane and Bamboo work. About 600 workers in the district are engaged in this industry which is mainly located in Udwada, Mandvi, Surat, Bardoli, Bansda, Dharampore, Bulsar, etc. Most of the workers belong to backward classes. It is a cottage industry.

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Baskets, chairs, stools and other items of furniture are prepared by the artisans with the help of bamboos, canes, nails, etc. Bamboos are available from the surrounding forests while cane is brought mainly from Bombay. The tools and equipment consisting of chisel, cutters, bands, etc. are purchased from the nearby towns. The finished products are sold locally and in cities like Bombay, Ahmedabad and Surat, through co-operative societies. It is estimated that for every 100 bamboo baskets sold the artisan gets a profit of about Rs. 2.

The business is full time and is carried on throughout the year. The workers get Re. 1 to Rs. 3 a day by way of wages. The persons engaged in this work are all illiterate and backward and hence they cannot engage themselves in any other occupation. For this reason this has become a hereditery work for them.

The following are the ten co-operative societies organised at different centres in the district. The societies purchase raw materials for their members and also sell their finished products.

TABLE No. 11

STATEMENT SHOWING THE FINANCIAL POSITION OF CANE AND BOMBOO WORKERS CO-OPERATIVE SOCIETIES AS ON 30-6-1957.

Sr. No. 1	Name of the Society. 2	Address 3	No. of Members 4	Share Capital 5	Reserve or other Funds 6	Profit or Loss 7	Remarks. 8
				Rs.	Rs.	Rs.	
1	Bansda Taluka Vans Kamdar Sahakari Mandli Ltd....	Bansda	72	2,610	7,360	+105	
2	Sodha Maritha & Fulwadi Vans Kamdar Sahakari Mandli Ltd.	Mandvi	12	116	62	—7	
3	Velargadh Salaiya Vans Kamdar Sahakari Mandli Ltd.	Mandvi	26	393	138	+19	
4	Bulsar Taluka Vans Kamdar Sahakari Mandli Ltd. ...	Bulsar	31	273	23	+266	
5	Songadh Taluka Vans Udyogik Sahakari Mandli Ltd.	Borisawer	32	160	57	+205	
6	Dharampur Vans Kamdar Sahakari Mandli Ltd. ...	Dharampur	37	500	138	+123	
7	Jamankuwa Vibhag Vans Kamdar Sahakari Mandli Ltd.	Jamankuwa	15	235	15	—	
8	Vyara Taluka Dang Vibhag Vans Kamdar Sahakari Mandli Ltd.	Unai	132	277	—	— 595	
9	Ambach Vibhag Vans Kamdar Sahakari Mandli Ltd.	Ambach	30	115	23	—	
10	Udwada Cane & Bamboo Workers' Producers Co-operative Society Ltd.	Udwada	14	930	—	—	

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Fishing.

Surat district has a fairly good coast line. Besides a considerable section of the population is non-vegeterian. These favourable conditions have hepled in the establishment of the fishing industry at some of the centres in the district. More important of them are Rander, Bhimpore, Dumas and Hajira in Chorasi taluka ; Borsi, Navsari, Matwad and Kanera in Navsari taluka ; Medhor, Gandevi, Dholai and Bilimora in Gandevi mahal ; Bulsar, Bhagada, Malwan, Magod and Dungri in Bulsar taluka ; Kolak and Umarsadi in Pardi taluka and Karanj, Bhagwa and Pardi Zankhari in Olpad taluka.

Fishing was not so paying an occupation in the past. The equipment at the disposal of fishermen was small and simple and they had to carry on their activities with whatever resources they had. They hardly earned enough even after a full day's toil.

The importance of this industry as well as its potentialities were soon realised by Government. The office of Superintendent of Fisheries was established at Bulsar in 1949 with a view to looking after the problems of the industry in Surat as well as in Broach districts. The office was shifted to Surat in 1956, as it was found that Surat was a more convinient centre to look after the problems of the industry in both the districts. The office has proved to be of considerable help to fishermen. It has lessened their financial, technical and other difficulties. Since its inception the office has given loans amounting to more than Rs. two lakhs to fishermen in Surat district, as follows :—

Year	*Amount*
	Rs.
1951-52	44,400
1952-53	15,600
1953-54	29,750
1954-55	36,315
1955-56	25,581
1956-57	27,154
1957-58	40,500
Rs.	2,19,300

The loans were utilised for construction and repairing of boats, preparing nets, etc.

The office is in charge of the two Government Fisheries schools, one at Kolak and the other at Umarsadi in Pardi taluka of the district. The schools are conducted with a view to imparting scientific training in fisheries. Subjects such as fisheries, net-making and carpentry are taught along with other

subjects. The schools have gained considerable popularity among the fisherfolk. The strength of the school at Kolak is 686 pupils and that of Umarsadi school is 546 at present (1958). The schools are equipped with modern workshops where wooden articles are manufactured by students and are then sold to the public. A fishing boat for the use of the school was recently supplied to the Kolak school.

In some of the villages fishing is carried on a co-operative basis while in others it is done individually by the fishermen. The co-operative societies supply equipment, boats, etc. to members. The boats generally cost more than Rs. 1,000 each. Usually a team of eight to ten persons works on one boat for a whole day. After the day's toil the catch is equally distributed among the crew. One share is kept aside by way of rent of the boat. The amount thus collected by way of rent is utilised for the purchase of new boats for the societies. At pesent (1958) there are in the district nine co-operative societies or fishermen. They are as follows :—

List of Fishermen's Co-op. Societies in Surat district (1957-58)

1. The Dumas Vibhag Fishermen Co-operative Multi-purpose Society Ltd., Dumas, taluka Chorai.
2. Shri Bhimpore Vividh Karyakari Sahakari Mandli Ltd., Chorasi.
3. Shri Vansi Borsi Machhimar Vividh Karyakari Sahahari Mandli Ltd., Borsi, taluka Navsari.
4. The Billimora Group Fishermen Multi-purpose Co-operative Society Ltd., Machhiwad, Billimora, Gandevi Mahal.
5. Dholai Bigri Fishermen's Co-operative Society Ltd., Dholai, Gandevi Mahal.
6. The Bhadeli Jagalala Fishermen Multi-purpose Co-operative Society Ltd., Bhadeli Jagalala, taluka Bulsar.
7. Shri Gujarat Vahanvatu and Machhimar Sangh, Ghanchiwad, Bulsar, taluka Bulsar.
8. Shri Umarsadi Sea-men's Co-operative Society, Umarsadi, taluka Pardi.
9. The Kolak Group Fishermen's Multi-purpose Co-operative Society Ltd., Kolak, Taluka Pardi.

The nature of the catch varies according to the season which starts more or less simultaneously at all the fishing centres in Bombay State. *Bombils* (Bombay duck), *Bhing*, *Gol*, *Dara* (Polynemus indicus), etc. are the different varieties of fish usually found on the coast line. The catches of *Bombils* are heaviest from October to January and those of *Gol* and *Dara* from February to May. The remaining period (from June to September) i.e. the monsoon is the main season for *Bhing* catch. The fish caught are generally sold in fresh condition but are sometimes cured and dried. A major part of the dried catch is sent to big towns such as Bulsar, Navsari, etc., or to Surat city. The adult male members of the families are engaged in the catching work for the whole day. The women folk are entrusted with the work of drying the fish or of selling them in the bazar. The prices in the bazar vary between Rs. 20 to Rs. 30 per maund.

The following is the production, in Bengali maunds, of the fishery commodities in Surat district for the last four years :

TABLE No. 12

STATEMENT OF PRODUCTION STATISTICS IN BENGALI MAUNDS OF FISHERY COMMODITIES IN SURAT DISTRICT

Commodities.	1954	1955	1956	1957
Bombay ducks dried	19,845	21,295	22,050	23,500
Cohea Sp. Dried	295	200	145	120
Prawns salted	215	195	120	105
Dara Salted	6,008	6,200	7,800	8,800
Gol salted	841	1,095	997	1,650
Kuth salted	3,409	4,359	3,854	4,850
Mushi salted	897	917	940	1,100
Cat fishes salted	98	137	125	154
Modad salted	330	388	395	459
Fish fertilizers	1,200	1,505	1,593	1,889
	33,138	36,291	38,019	42,637

The table clearly indicates a gradual increase in the total production of fishery commodities in the last four years.

The following table gives taluka-wise figures about the population of fishermen, persons employed in fishing and the total number of fishing vessels in the important fishing centres of the district.

TABLE No. 13.

FISHERIES IN SURAT DISTRICT (1957-58)

Taluka.	Important Fishing villages.	Population of Fi:hermen.	Men power employed in Fishing.	Total No. of Fishing Vessels.
Chorasi	Rander	5,168	1,263	162
	Bhimpore			
	Dumas			
	Hajira			
Navsari	Borsi	7,573	2,071	299
	Navasari			
	Matwad			
Gandevi Mahal	Kanera Medhor	8,535	2,227	98
	Gandevi			
	Dho ai			
	Bilimora			
Bulsar	Bulsar	6,073	2,019	175
	Bhagada			
	Malwan			
	Magods			
	Dungri			
Pardi	Kolak	4,458	1,194	227
	Umarsadi			
Olpad	Karani	1,542	518	3
	Bhagwa			
	Dandi			
	Pardi Zankhri			
		33,349	9,292	964

It was found during our enquiries that fishermen staying in remote villages have to face transport difficulties. Fish,

being an easily perishable product, has to be sent to the market quickly. Supply of refrigerator machines to fishermen in remote villages will enable fish to be preserved for a long time. More training centres at important places will aslo help greater progress of this industry.

Khadi

Khadi has acquired an important place in the rural economy of the district. The district is considered to be a good cotton growing area and many a villager has found in khadi a good part-time occupation. Several agriculturists who find themselves to be without any gainful employment during the off seasons utilise their leisure hours in spinning and weaving in their homes. Though this may not bring any substantial cash benefits to them it does help them in acquiring self-sufficiency in their cloth requirements. It is reported that there are nearly 10,000 spinners and nearly 500 weavers in the district who have taken to khadi as their secondary occupation. While some of the weavers weave mil, yarn, the majority of them weave hand-spun yarn. With the introduction of the *Ambar charkha* the production of hand-spun yarn will increase to a considerable extent and so the number of those weaving hand-spun yarn is bound to increase even more.

The spinners purchase good and long staple cotton from the district area and spin it on the spinning wheel (*charkha*). The tools and equipment required are the spinning wheel, the ginning charkha, the carding machine, etc. There are three manufacturing centres (*Saranjam Karyalayas*) which manufacture this equipment. It is reported that nearly one lakh square yards of khadi is produced in this district every year.

The Bombay Village Industries Board and the Khadi Commission give grant and subsidy for the development of this industry. There are five *Gramodyog Sanghs* which look after the development programmes of the industry. Sale Depots (Khadi Bhandars) are situated in most of the towns of the district. Recently Training Centres *(Parishramalayas)* for Ambar Charkha have also been started under the Ambar Charkha programme.

Pottery

This is an important village industry established in most of the villages in the district. The persons engaged in this industry are locally known as *Kumbhars* (potters) and they are all poor and illiterate. About 800 persons in the district are reported to be engaged in this industry. Their business is carried on all round the year though it is somewhat slack in the rainy season.

The quality of the earthen articles prepared by the potters depends upon the skill of their hands rather than the equipment they use. Most of the potters are generally thoroughly experienced in their work as it is a hereditery work for them. The raw materials required are clay and fuel. Generally the

black and porous clay is used. The clay is first mixed with water and properly knecled. Than it is placed on *chak* (pottery wheel) where it is given the required shape and size. The articles thus prepared are then put inside a kiln which is locally called *Nibhado* or *Nimado*, and burnt there for a certain period of time after which they are ready for sale. Generally the potter is able to meet the local demand for the earthen wares and hence people have not to buy them from elsewhere. The articles generally produced are *Matla* (pots), *Kunja* (jugs), *Kodiya* (cups), etc., etc. Besides these articles of daily use for which there is a constant demand, clay toys are also prepared on special occasions such as fairs and festivals. The equipment required for the pottery work are pottery wheel, framers, buckets, etc., etc.

It is estimated that one artisan can prepare finished articles worth Rs. 2 to Rs. 4 per day. In most villages, however, the articles are sold by the barter system, especially to the agriculturists. The potters supply the earthen requirements to the local farmers and in exchange get agricultural commodities such as *Jowar*, *Bajri*, etc., at the time of harvest.

There is no co-operative organisation in this industry.

Oil ghani

Oil-seeds crushing industry or oil ghani industry as it is called here is still considered to be an important village industry in the district though it has lost some of its past dominance due to the growing competition it has to face from the oil mills. The industry is run by persons known as *Ghanchis* who are backward and uneducated and for whom this is essentially a hereditary occupation. The *Ghanchi* carries on his occupation in his own house which serves the manifold purposes of storehouse, production centre and sale-depot. There were about 300 Ghani owners in the district in 1953-54. Surat, Bardoli, Chikhali, Bulsar, etc., are the main centres of the industry.

Ghani i.e., the seed crushing equipment is made of wood and is run by animal agency, mostly bullocks. The initial investment required to start one oil *ghani* is estimated to be between Rs. 1,200 and Rs. 2,000. The oil seeds crushed are mostly sesame (*tal*) seeds. The *ghani* oil is believed to be more wholesome in content and so the villagers prefer it to mill oil. It is estimated that one *ghani* can crush about 50 (Bengali) maunds of oil seeds out of which 20 to 25 maunds of *tal* oil can be produced, the remaining being the by-product known as *Khol* (oil cake) and the wastage which is generally 2 to 3 per cent. of the oil seeds crushed. *Tal* oil is sold at about Rs. 75 per Bengali maund and oil cakes at Rs. 10 to Rs. 15 per Bengali maund. The prevailing market prices for *tal* seeds vary between Rs. 35 and Rs. 40 per Bengali maund. The oil produced is sold directly to the local consumers, there being no agency in between the *ghani* owners and the consumers. The oil cakes are usually sold to the traders on wholesale rates.

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The workers employed by the *ghani* owners are paid daily wages varying between Rs. 1-8-0 and Rs. 3 each. They work for eight to ten hours a day.

Two *Teli* co-operative Societies were established in the district in 1953-54.

Tanning and Leather-work

Tanning and leather-work are two allied industries and they together constitute the second largest cottage industry in the rural sector of the district. These industries are generally carried on by hereditary artisans who are experts in their work.

(A) *Tanning*.

The number of workers engaged in the tanning industry in the district are reported to be about 500. The main centres of this industry are Madhar, Kachholi, Gandevi, Khergam, Ovada, Kadod, Lilapur, etc.This industry is carried on by the rural tanners known as *Chamars* and *Khalpas*. They have got their own colonies just at the end of the villages. Inside the colonies the tanners keep a few large pits in which the tanning work is carried out.

There are different processes in tanning such as cleaning, deliming, bark tanning etc. The whole tanning process as executed in the district is like this. First of all the raw hide is cleansed and then mixed with salt. It is then dipped into lime water and washed. After that, it is dipped into *babul* bark liquor. Again it is washed and kept in *harda* (myrobalan) liquor. After a few days it is taken out and straightened with the help of '*Ranpi*'—a sharpened tool—and finally oiled and dried. A hide is thus changed into leather in about 45 days.

One artisan family generally owns two or three lime pits, three water tanks and other tools like chisel, *Ranpi*, *Ari*, wooden blocks, etc., which cost about Rs. 300. The materials required for tanning processes include lime, *harda*, *babul* bark, oil, etc. They are all purchased locally. A family, on an average, tans 20 buffalo hides per month and gets a profit ranging between Rs. 60 and Rs. 120 a month. Most of the tanners do not employ outside labour. The work is carried on by their family members. The workers are paid from Re. 1 to Rs. 3 a day. The finished tanned hides are generally sold in Surat and surrounding areas. The poorer classes of cobblers are their chief buyers. The market has dwindled in recent years due to the increasing use of American chrome splits for manufacturing washers.

Attempts are being made to improve the quality of the leather tanned. The Department of Industrial co-operatives and Village Industries has given training in refined tanning to some artisans at Kachholi, Kadod, Lilapur, Nagdhara, Ovada,

Gandeva, Khergam, etc. Co-operative Societies which number seven at present also extend the necessary help to the artisans. Such societies are organised at Kadod, Kachholi, Ovada, Kher-Gam, Lilapur, Madhar, Nagdhara and Gandevi.

The following are the details regarding the Co-operative Societies (1957-58).

Name of the Co-operative Society.	Village	Members	Share Capital
			Rs.
1. The Sinhal Leather Worker's Co-operative Producers Society Ltd.	Kadod	11	2,780
2. The Ovada Tanner's Co-operative Producers Society Ltd.	Ovada	15	1,970
3. The Parmar Leather Worker's Co-operative Producers Society Ltd.,	Madhar	16	1,300
4. The Gandeva Tanners' Producers Co-operative Society Ltd.	Gandeva	16	550
5. The Khergam Tanners' Co-operative Producers Society Ltd.	Khergam	21	840
6. The Nagdhara Tanners' Co-operative Producers Society Ltd.	Nagdhara	13	2,870
7. The Lilapore Tanner's Co-operative Producers Society Ltd.	Lilapore	15	1,200
8. The Solanki Leather Workers' Co-operative Producers Society Ltd.	Kachholi	24	3,380

All these Co-operative Societies are affiliated to the Surat District Industrial Co-operative Association Ltd. The association supplies raw materials to those societies and takes back their finished products. The marketing of these finished products is done by this association on its own account through a sales depot. The association has started, since October 1957, a re- tanning and finishing centre at Bhestan, seven miles from Surat, where the hides tanned by the respective tanners are re-tanned. This is done so as to improve the quality of the leather and thereby enable the tanners to fetch better prices. The re-tanning and finishing centre is the first of its kind in the whole of Gujarat and is bound to help the tanners very much as far as the marketing problem is concerned. The association supplies the tanners with the necessary raw materials and then purchases the tanned leather from them for marketing. The asso ciation is also running four flaying centres at Bhestan, Ghodadod, Akhakhole and Tharoli. These centres will be helpful for the supply of raw hides to the Tanners' societies. The monthly average of procurement of dead animals is about 70. The association is supplying leather and tanned hides to the Leather Working Society for the manufacture of shoes, chappals, etc., and also helps the society in marketing their finished products

(B) Leather Work.

Leather work is perhaps, the most common industry found established at all the taluka centres of the district. The main centres of the industry are Surat, Bulsar, Bardoli, Chikhali, Gandevi, Jalalpore, Navsari, Bansda, Vyara, etc. This is

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essentially a hereditory industry. The number of persons engaged therein at present, is reported to be over 3,000. Most of the units are run by whole families and are housed in residential premises of the artisans.

The artisans get tanned hides locally or from the surrounding areas. These rough and thick hides are used only for preparing the shoe soles and heavy leather bags. The leather used for the upper part of the shoes is generally brought from Bombay. Apart from footwear other leather goods like money purses, bags, suitcases, etc. are also prepared. The materials required are tanned hides, leather of various qualities and other miscellaneous articles like nails, rings, buttons, polishes, etc. The tools and equipment required include one set of *ari*, *ranpi*, anvil and a leather sewing machine. All of them are purchased locally except the sewing machines which are purchased from Bombay. The cost of the equipment varies between Rs. 500 and Rs. 1,000.

It is estimated that an experienced worker with one assistant can prepare one pair of shoes per day and fetch a price of about Rs. 15 out of which he can get a profit of about two to three rupees. Wages are paid to the workers in cash. On an average he gets about Rs. 2 per day. The employment provided is full time throughout the year.

It is believed that given proper training, the artisans will be able to prepare better qualities of leather articles and thus stand the competition of the large factories. The school at Navsari started by the Department of Industrial Co-operatives and Village Industries, imparts training in leather work. The school was originally started at Surat but was later shifted to Navsari. About 15 students have been trained so far.

There is one co-operative society in the leather work industry at Surat operating under the guidance of the District Industrial Co-operative Association Ltd., Surat. It helps the artisans to purchase and market their goods.

ORGANIZATION OF LABOUR Introduction

The trade union movement is in general associated with the growth of industries in any region. It is the degree and nature of industrialization of a district that determines the growth and nature of the labour movement in that district. The growth of the labour movement in Surat district in the immediate post-war period can be attributed to this fact. In its early stages, the movement was however confined to the textile industry.

Growth of Labour Movement

The earliest trade union formed in the district was the Surat Mill Kamdar Union. It was registered in 1945. Its registration was, however, cancelled in 1949 for failure to submit

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its accounts to the Registrar under the Indian Trade Unions Act, 1926. In 1945, another trade union, namely the Surat Textile Labour Union, was registered to further the interests of the textile labourers. After 1947, however, there was an appreciable increase in the number of trade unions in the district. During 1947-50, 12 trade unions were registered. The number of trade unions registered in 1951, 1952, 1953 and 1954 was 4, 6, 4 and 4 respectively.

The industry-wise break-up of registered trade unions shows that eleven trade unions were formed in the textile industry, five in municipal services, three in gas, water and sanitary services, two in commerce, banking and insurance, one in food, beverages and tobacco industry, one in wood and cork work, one in paper and paper products, one in printing publishing and allied trades, one in metal products, one among sea-men, two in motor transport and one in miscellaneous industries. Though in the initial stages, the labour movement was confined to the textile industry, it has gradually spread so as to cover other industries of the district. The labour movement is at present mainly confined to Surat, Navsari and Billimora which are important industrial and commercial towns of the district.

The rapid growth of trade unions in the district in the last ten years was a reflection of the general tendency towards the formation of trade unions in the Bombay State. The working class, as a whole, become more conscious of their rights and realized the value of collective bargaining for safeguarding their interests. They, therefore, coombined to improve their working and living conditions.

Membership

The total membership of the 32 trade unions on 31st March 1954 was 11,406 out of which 1,308 were female members. On 31st March 1955, however the number had increased to 43 registered trade unions with a total membership of 13,267.

It should, however, be noted that not all these members were strictly industrial workers, as some of them were not employed in factories as defined by the Factories Act. Chief among such trade unions which belong to workers other than those employed in factories were the union of workers in municipalities.

Resources

The income and expenditure pattern of 32 trade unions for the year 1953-54 was as follows. Their total income which consisted of contributions from members, donations, sale of periodicals, books and rules etc., interest on investments and income from other sources was Rs. 60,525. Of this, contributions from members amounted to Rs. 49,070 i. e. nearly 81 per cent of the total income. The other two important sources of income--miscellaneous and donations-amounted to

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Rs. 7,830 and Rs. 3,297 respectively. The average income of a trade union for that year came to nearly Rs. 1,891. The Total expenditure of these unions for the same year was Rs. 48,701 out of which Rs. 33,088 i.e. 67.9 per cent were spent on salaries and allowances of the staff and expenses of establishment. This is the biggest item on the expenditure side. Conducting trade disputes, legal expenses and compensation constitute other important items of expenditure. The rest of the items reflect the extent of welfare activities carried out by the unions. Funeral, old age, sickness and unemployment benefits, educational, social and religious benefits all these together constitute welfare activities carried out by the trade unions and their extent is determined by the financial position of the unions. The total expenditure of Rs. 48,701 was distributed as follows -:—

Item of Expenditure	Amount Rs.	Percentage to total
1. Salaries, allowances and expenses of offices ...	14,165	29.1
2. Salaries, allowances and expenses of establishment including rents, rates and taxes and stationery, printing and postage.	18,923	38.8
3. Auditors' fees ...	506	1.0
4. Legal expenses ...	2,052	4.2
5. Expenses in conducting trade disputes ...	3,447	7.1
6. Compensation paid to members for loss arising out of trade disputes.	1,355	2.8
7. Funeral, old age, sickness, unemployment benefits, etc.	...	...
8. Educational, social and religious benefits ...	383	0.8
9. Cost of publishing periodicals ...	997	2.1
10. Expenses incurred under section 15(i) of the Act.	2,691	5.5
11. Other expenses ...	4,182	8.6
Total ...	48,701	100.00

Assets and Liabilities

For the same year i. e. 1953-54 , the total assests of these 32 trade unions in the district stood at Rs. 60,159. They were distributed as follows: cash Rs. 30,771 Securities Rs. 800, subscriptions due Rs. 1,255 and miscellaneous Rs. 27,333. As against this, total liabilities amounted to Rs. 60,159 out of which the total amount to the credit of the general fund account of the trade unions was Rs. 40,745 and other liabilities amounted to Rs. 19,414.

Legislation and its working

With the passing of the Bombay Industrial Relations Act, 1946 (State Act) and the Industrial Dispute Act, 1947 (Central Act), which were brought into force by the state of Bombay on 29th September 1947 and 1st April 1947 respectively, the relations between the employers and their workers have been more precisely regulated than before and machinery for the settlement of industrial disputes by conciliation and arbitration under the Bombay Industrial Relations Act 1946 and for conciliation and adjudication under the Industrial Disputes Act, 1947 has been provided for.

Under the Bombay Industrisl Relations Act, 1946, a dispute may be referred for conciliation to a conciliator by any of the parties and for arbitration to the Labour Court, Industrial Court or Wage Board at the instance of a Representative union which is also an Approved Union or by both the parties to a dispute or by Government. By the end of the year 1953-54, the following unions were registered under the Bombay Industrial Relations Act as representative unions for the industry and the local area mentioned against them.

TABLE No. 14

Name of Trade Union	Industry	Area
1. Surat Textile Labour Union, Surat.	Cotton Textile	Surat Municipal Borough.
2. Surat Electricity Company's Staff Union, Surat.	Generation and supply of Electrical Energy.	Do.
3. Majoor Mahajan Mandal, Navsari.	Cotton Text le	Navsari Taluka.
4. Majoor Mahajan Sangh, Bilimora.	Do.	Gandevi Mahal.
5. Surat Silk Mill Workers' Union, Surat.	Silk Textile.	Surat Municipal Borough.
6. Surat Silk Textile Labour Union, Surat.	Do.	Chorasi Taluka, excluding Surat Municipal Borough.

The working of these acts during the years 1952, 1953 and 1954 is indicated in the following two tables.

TABLE No. 15

A STATEMENT SHOWING THE POSITION OF THE CASES DEALT WITH IN CONCILIATION UNDER THE BOMBAY INDUSTRIAL RELATIONS ACT, 1946 DURING THE YEARS 1952, 1953 AND 1954.

Surat District

Year.	No. of disputes.		Total.	Disputes by causes.					Disputes by result.			No. of disputes pending at the end of the period
	Pending at the beginning of the period.	Received during the period.		Pay and allowances	Bonus.	Personal.	Leave and hours of work.	Other Causes.	Settled.	Failed.	With-drawn, closed etc.	
1	2	3	4	5	6	7	8	9	10	11	12	13
1952 ...	16	51	67	7	39	7	9	5	24	22	11	10
1953 ...	10	33	43	16	17	2	3	5	16	5	17	5
1954 ...	5	94	99	74	15	3	2	5	55	11	15	18

(1) Of the 67 cases dealt with in conciliation during 1952, 20 were from the Cotton Textile Industry, 46 from the Silk Textile Industry and 1 from the Textile Processing Industry.

(2) Of the 43 cases dealt with in conciliation during 1953, 27 were from the Silk Textile Industry, 14 from the Cotton Textile Industry and 2 from the Electricity Industry.

(3) Of the 99 cases dealt with in conciliation during 1954, 17 were from the Cotton Textile Industry, 79 from the Silk Textile Industry and 3 from the Electricity Industry.

TABLE No. 16

A STATEMENT SHOWING THE POSITION OF THE CASES DEALT WITH IN CONCILIATION UNDER THE INDUSTRIAL DISPUTE ACT, 1947, DURING THE YEARS 1952, 1953 AND 1954.

Surat District

Year.	No. of disputes.			Disputes by causes.					Disputes by result.			
	Pending at the beginning of the period.	Received during the period.	Total.	Pay and allowances	Bonus.	Personal.	Leave and hours of work.	Other Causes.	Settled.	Failed.	With-drawn, closed, etc.	No. of disputes pending at the end of the period.
1	2	3	4	5	6	7	8	9	10	11	12	13
1952 ...	1	27	28	4	14	1	1	8	6	9	5	8
1953 ...	8	36	44	7	25	6	—	6	16	12	3	13
1954 ...	13	975	988	909	55	2	14	8	920	49	13	6

(1) Of the 28 cases dealt with in conciliation during 1952, 6 were from the Cotton Textile Industry, 2 from the Engineering, 6 from the Transport and 14 from miscellaneous industries.

(2) Of the 44 cases dealt with in conciliation during 1953, 14 were from the Cotton Textile Industry, 4 from the Engineering, 17 from the Transport, 1 from the Chemicals and 8 from miscellaneous industries.

(3) Out of 988 disputes dealt with in conciliation during the year, 53 were from the Silk Textile Industry, 12 from the Engineering Industry, 909 from the Jari Industry, 8 from the Municipality and 6 from other miscellaneous industries.

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Industrial Arbitration and Adjudication

The Court of Industrial Arbitration (or the Industrial Court as it is commonly referred to). Bombay, as constituted under section 10 of the Bomby Industrial Relations, Act has jurisdiction over the whole state. It acts as a court of Arbitration in industrial disputes referred to it by the Government, the representative unions and jointly by the partis to a disputes. in its appellate jurisdiction, it can decide appeals referred to it from the decisions of the Labour Courts, the wage Boards, the Registrar, Bombay Industrial Relations Act and the Commissioner of Labour. The nature of the cases referred to the Industrial Court, Bombay, from 1950 to 1954 from Surat district was as follows :

Nature of Cases	Number of Cases			
	Pending at the begining of the period	Revised during the period	Disposed of duiring the period	Pending the end of the period
1, References under Section 73 add 73A.	..	67	67	...
2 Appeals . .	.	22	20	2
3. Submissions ...	...	11	11	...
4 Miscellaneous Applications.	...	2	2	...
5 Appeals under Industrial Employment (standing orders)Act	...	...	...	...
Total ...	..	102	100	2

Industrial Tribunals

The adjucation machinery set under the Industrial Disputes Act, 1947 consists of six industrial tribunals. The nature of the

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cases referred to the industrial tribunals from Surat district from 1950 to 1954 was as follows:—

Nature of Cases	Number of Cases			
	Pending at the beginning of the period	Received during the period	Disposed of during the period	Pending at the end of the period
1. Main Adjudication references.	...	22	21	1
2. Applications under Section 33.	33	...	...	
3 Complaints under Section 33-A.	...	8		...
4. Miscellaneous Applications under Section 20(2) of the Industrial Disputes (Appellate Tribunal) Act, 1950.	...	6	6	...
5. Total ...	...	36	35	1

Labour Courts

There are four labour courts in the Bombay State two each at Bombay and Ahmedabad. The labour courts decide disputes regarding orders passed by an employer under the standing orders governing the relations between employer and employee, changes made in any industrial matter specified in schedule III of the Bombay Industrial Relations Act and special disputes referred to them under the Act. They have also powers to decide upon the legality or otherwise of a strike, lock-out, closure, stoppage or change. They have also jurisdiction to try persons for offences punishable under the Bombay Industrial Relations Act. During the perod from 1950 to 1954, the labour courts received 338 cases from Surat district.

Wage Boards

There are three Wage Boards appointed for the whole state, one for the cotton textile industry, one for the silk textile industry and one for the sugar industry. They decide such disputes as are referred to them under the Bombay Industrial Relations Act. They further decide such other disputes as are directly referred to them by representative unions under Section 86-c of the Bombay Industrial Relations Act, 1946. In 1951, eight references were received by the Wage Boards. Of them two pertained to the increase in the number of employees and the remaining six pertained to the reduction of employees. In 1954, four references were received out of which one was regarding fixation of duties and work load, one pertained to reduction of workers, one was for rationalization and the remaining one was for derationalization.

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The Bombay Labour Welfare Fund Act, 1953

The Act provides for the constitution of a fund for the financing of activities to promote labour welfare in the state and for conducting such activities. The fund constituted under the Act, sonsists of fines realized by employers from workers, all unpaid accumulations, any voluntary donation, any other funds transferre to the Bombay Labour Welfare Board and any sum borrowed by the Board. At present there is one 'B' type labour welfare centre in Surat. It provides facilities for games, arranges entertainment programmes, maintains a library, conducts adult education classes, music class and sewing class for women. A large number of workers take advantage of this centre.

CHAPTER 7—FINANCE.

INTRODUCTION

IF AGRICULTURE AND INDUSTRY CONSTITUTE the backbone of an economy, finance is the heart of it. A well-planned economy pre-suposses the existence of a co-ordinated and integrated capital and credit organisation to cope with the long-term, medium-term and day-to-day needs of agriculture, trade and industry. The efficiency with which the financial institutions respond to the needs of these three main branches of an economy is a yardstick whereby the success or otherwise of an economy could be measured.

A cursory glance at the working of these institutions would show that these capital and credit institutions in the past had a chequered history. The indigenous banker in the town and the village money lender in the village were the two most important sources of credit supply. The excessively high rates of interest charged by them had an adverse effect on industry and agriculture with the result that these two branches of our economy sufferred much. No concrete measures were taken to improve these conditions till recently. However, some efforts have been made to rectify the defects obtaining in these agencies and to bring them on lines conducive to the progress and prosperity of the country The most important development of this century has been the gradual replacement of these non-institutional private agencies by new ones-viz., the co-operative credit societies, co-operative banks, and joint stock banks. The moneylender is being gradually replaced by co-operative credit societies while modern joint stock banks are replacing indigenous bankers. At the same time the old non-institutional agencies have not been abolished but are allowed to function with important modifications so that they may fit in with the needs of national requirements and also conform to the social values of the times.

The agencies that are now engaged in the financial activites of the district are co-operative credit societies, co-operative banks, joint stock banks, moneylenders and indigenous bankers. Their function is two-fold; to mobilise the savings of the public and to canalise them into different productive activities such as financing traders, agriculturists and industrialists. Besides these, there are insurance companies whose main business is to collect the savings of the people in the form of premia and invest them

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in some interest-yielding securities or to contribute to the capital requirements of industries by investing in shares or debentures. Mention must also be made of private and public limited companies which, *interalia*, attract savings of the public in the form of share capital and deposits and invest them in different productive activities. The State also plays no insignificant part in financial activity. It floats different kinds of loans and raises the funds required for financing its plans and other Governmental outlays. By the issue of National Savings Certificates it calls upon people even of moderate means to invest and thus participate in the mighty task of building a strong and prosperous India. It also gives financial aid to industry and agriculture though to a small extent by advancing loans and subsidies.

It is, however, not possible to give a complete and detailed account of the part which each of the above agencies play in the financial activities of the district. An attempt has, however, been made to estimate and evaluate the role of the above agenices on the basis of material that is readily available.

MONEYLENDERS

The age old institution of moneylenders still occupies a dominant position in the rural credit structure of our economy. Efforts have been made and are being made to develop and enlarge alternative sources of credit and generally to control and regulate business practices followed by moneylenders. Attempts have been made both by Government and co-operative societies to promote alternative credit sources. But all these have not affected much the monopolistic position of moneylenders, especially the village moneylenders.

Moneylenders in the past

The old Gazetteer of Surat published in 1877 recorded two broad classes of moneylenders-viz. the professional moneylenders and the non-professional moneylenders. Successful shop-keepers, traders, well-to-do cultivators and others whose position enabled them to borrow at low rates and lend at high rates of interest comprised the class of non-professional moneylenders. Moneylending was for them both a subsidiary source of income and a profitable avenue of comparatively safe investment for their surplus money. Of professional moneylenders. there were four distinct varieties; the banker or *Sahukar*; the pawn-broker or *Jansau Sahukar*; the usurer or *Kistia*, that is, the man of instalments; and the village moneylender or *Marwari*.

The main business of the banker was, originally, confined to granting and cashing of bills of exchange. He, however, took up moneylending business later on and invested part of his capital in it. The credit of these bankers was so good that small payments or *Sanchamani* were actually made by the depositors for the privilege of having their money in such safe 'custody.'

The pawn broker, or *Jansau Sahukar* as he was better known locally, lent money only against the security of articles or *Janas*, deposited with him. In practice, the pawn-brokers advanced only against the security of gold and silver ornaments. They were quite popular especially with respectable families who were able to obtain advances secretly from them to tide over a domestic difficulty without incurring the exposure and risk of seeking help from the ordinary usurer. The pawn-brokers lent to the extent of 90 per cent. of the value of the security and the rate of interest charged varied from 4 to 6 per cent. per annum.

The third variety of money-lenders was the low-class town-usurer (the *Kistia*) or the man of instalments. As a class, he was much hated and cursed for his exorbitant business charges, fraudulent dealings and bad business tactics. He exploited the helplessness of the borrowers to the utmost. He did not hesitate to go to court to recover his claim. When once in court, the usurer did not desist from making use of all the powers the law gave him in attaching the property and imprisoning the person of the debtor. Rates of interest charged by him ranged from 12 to 25 per cent. depending upon the credit-worthiness of the borrower. This was, however, but a small part of the usurer's actual gains. His other malpractices included drawing up a bond of sum larger than that actually lent. Some times 4 to 6 per cent. of the amount actually lent was withheld by way of premium or *mandamani*.

Every village in Surat, except some hamlets which were chiefly inhabited by aboriginal tribes, had its *Marwari* shopkeeper and moneylender. So completely had these *Marwari* shop-keepers or moneylenders monopolized the business of money-lending in the rural parts of the district, that in the villages south of *Tapi*, *Marwari* was the term in common use for moneylender. He was usually known to be greedy and unscrupulous. In this connection the remarks made by the Collector of Surat in 1840 may be noted :

"When a cultivator has come under obligation to him for advances, the *Marwari* either relaxes his demand, invites further loans, or exacts strict enforcement of the bond, according to the circumstances of his debtor; but, as he is too profitable a dependent to be allowed to go free, the debtor is seldom encouraged to pay off the whole of his debt. The same artful management is employed to keep the poor artizan or mechanic the slave of his creditor, and to convert the chief fruits of his labour to the use of the money-lender; the latter always dealing out such assistance as will keep the labourer in work, but never allowing him to advance so far in prosperity as to free himself entirely from thrall."*

One other variety of the village moneylender was the *Parsi* liquor-seller generally found in bigger aboriginal villages. His

*Mr. Simson, Principal Collector of Surat, to the Revenue Commissioner, No. 322, dated 29th July, 1840.

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profits were almost entirely derived from his dealings with men of the dark races or *Kaliparaj* as they were commonly known. Catering to their passion for strong drink, the Parsi liquor seller gave them liquor the worth of which was to be repaid in grain if the customer happened to be a cultivator. If he happened to be a labourer the moneylender made him work in his fields. So great was his authority in the village of his adoption that people were reported to be inclined to obey his orders in preference to the summons of a village headman or a Government officer.

Classes of Moneylenders

In these paragraphs have been described in some detail the various classes of moneylenders as they were when the old Gazetteer of Surat District was compiled. The Bombay Provincial Banking Inquiry Committee (1929-30) in its report listed the following among indigenous credit agencies; apart from indigenous bankers who were classed separately:

(1) Moneylenders:.

- (*a*) village moneylenders;
- (*b*) town moneylenders;
- (*c*) land-owners or agriculturist moneylenders;
- (*d*) goldsmiths and dealers in ornaments who specialise in loans secured by pledge of ornaments ;
- (*e*) wealthy persons of all classes who invest surplus funds in loans.

(2) Shroffs and other persons dealing in *hundis*..

(3) Merchants, commission agents and *dalals*.

It can be seen from a comparison of these agencies with the classes of moneylenders described in the old Gazetteer that the credit structure in rural areas had not undergone any material change during the course of over half a century, except for the introduction of the co-operative movement and the establishment of co-operative credit societies. The extent of their activity was however not appreciable.

With the enforcement of the Bombay Moneylenders Act (XXXI of 1946) the distinction between these different agencies has, more or less, only a historical interest as their activities and methods of business have been so regulated that they fall under two broad classes viz. moneylenders and banks.

Legislative Control

Legislative control over moneylenders became necessary as a good many of them were found indulging in very questionable business practices. They took unfair advantage, firstly, of their virtual monopoly in the field of finance, secondly, of the

illiteracy, ignorance, credulity and helplessness of the villagers and thirdly, of the absence of any effective legislative control and regulation of their activities by the State.

The Indian Central Banking Inquiry Committee (1931) listed the following as some of the malpractices followed by money-lenders:-

(*a*) demand for advance interest ;

(*b*) demand for a present for doing business ;

(*c*) taking of thumb impression on a blank paper with a view to inserting any arbitrary amount at a later date if the debtor became irregular in payment of interest ;

(*d*) manipulation of accounts to the disadvantage of the debtor ;

(*e*) insertion in written documents of sums considerably in excess of money actually lent, and ;

(*f*) taking of conditional sale deeds in order to provide against possible evasion of payment by the debtor.

Such practices acted as a serious drag on agricultural economy as they tended to curb all the incentives to improve agriculture because a lion's share of the increased output of grains as a result of greater efforts on the part of the cultivator was appropriated by the moneylender in satisfaction of his dues.

It was felt, therefore, that the institution of moneylenders should be gradually replaced by other credit agencies. In the meantime it was necessary to regulate the business of money-lenders by appropriate legislative measure so as to curtail the domination of moneylenders on rural economy. The Bombay Moneylenders Act was enacted with this purpose in view.

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Bombay Moneylenders Act, 1946 and its working.

The Act which came into force from November 17, 1947 required all persons and institutions who were engaged in money-lending business (excepting those expressly excluded by the Act such as-Scheduled Joint Stock Banks, Co-operative Societies etc.) to take out licences in order to carry on the business. The Act required moneylenders to maintain their accounts in prescribed forms and to give in any recognized language, prescribed returns every year to their borrowers and to the State. The Act also prescribed maximum rates of interest to be charged by the moneylenders on secured and unsecured loans. The Government reserved the right to alter the maximum rates of interest from time to time. The provisions of the Act were thus intended to regulate the activities of the creditor. At the same time they were calculated to protect the debtor from the consequences of reckless borrowings. With his account periodically before him, the debtor was expected to be conscious of his increasing liabilities and to take stock of his position from time to time.

In the light of experience gained of the working of the Act, some amendments were found necessary. An important amendment empowered the Government to vary the maximum rates of interest that could be charged.

Two other important amendments incorporated in the Bombay Moneylenders (Amendment) Act, 1951 provided that non-scheduled banks should be excluded from the purview of the Act and loans from landlords to tenants for financing crops or seasonal finance of not more than Rs. 50 per acre of land held by tenants should be exempted from the provisions of the Act except for the purposes of sections 23 and 25 thereof. Loans extended to licenced moneylenders were also exempted from the purview of the Act. This exemption was intended to facilitate the flow of capital from big financiers to persons actually engaged in money-lending business.

In exercise of the powers given under section 25, the Government raised (by a notification dated 5th July, 1952) the maximum rates of interest on secured loans from six per cent. to nine per cent. and on unsecured loans from nine per cent. to twelve per cent. This upward revision was necessitated in view of the

opposition of some of the moneylenders especially the pawn-brokers who contended that the maximum rates of interest as laid down in the Act were not remunerative since they did not provide sufficient margin for maintenance, valuation charges etc. This amendment did bring about an increase in the number of licenced moneylenders as can be seen from the following table. This increase, however, was much below expectation.

TABLE No. 1

LICENSED MONEYLENDERS—SURAT DISTRICT.

Period	No. of Applications received by Assistant Registrar from Money lenders for grant of renewal of licences	No. of licences granted for the first time	No. of licences renewed	No. of Money lenders holding valid licences as on 31st July of the ending year.
Nov. 1947 to July 1948	398	148	7	—
1948-1949 ..	118	69	49	139
1949-1950 ...	90	6	80	86
1950-1951 ...	107	8	90	98
1951-1952 ...	84	2	79	81
1952-1953 ...	89	9	76	85
1953-1954 ...	91	10	81	89
1954-1955 ...	93	9	84	93
1955-1956 ...	103	13	86	99

It is clear from the above table that since 1951-52 the number of moneylenders holding valid licences has been gradually rising. This increase may partly be attributed to the recent amendment to section 33 of the Act according to which carrying on money-lending business without a money-lending licence is made a cognizable offence. However, the number of moneylenders taken by itself is too small for a district like Surat. There are grounds to believe that a fairly large number of moneylenders carry on their business without licences and resort to a number of evasive and unlawful business practices.

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The following table shows the number of moneylenders distributed taluka-wise in 1955-56 and 1956-57.

TABLE No. 2

TALUKA WISE DISTRIBUTION OF MONEYLENDERS

Name of Taluka	1955-56	1956-57
1. Mangrol	2	2
2. Mahuwa	...	1
3. Vyara	2	3
4. Kamrej	...	...
5. Pardi	4	4
6. Navsari	10	9
7. Gandevi	2	5
8. Chorasi	21	21
9. Valod	10	10
10. Olpad	4	4
11. Bardoli	5	4
12. Bulsar	2	2
13. Songadh	32	32
14. Dharampur	1	1
15. Mandvi	...	...
16. Palsana	...	...
17. Bansda	...	...
18. Chikhali	5	5
Total ...	100	103

The following table shows the amounts of loans advanced by licensed moneylenders to non-traders and, as far as available, to traders between 1947 and 1956.

TABLE No. 3

TRANSACTIONS OF MONEYLENDERS BETWEEN 1947 and 1956—SURAT DISTRICT

Period	Loans to traders by		Loans to non-traders by		Total of columns 2 and 4	Total of columns 3 and 5	Total of columns 6 and 7
	Moneylenders not exempted under section 22	Banks and companies exempted under section 22	Money lenders not exempted under section 22	Banks and companies exempted under section 22			
1	2	3	4	5	6	7	8
17th November, 1947 to 31st July, 1948	4,34,924	41,75,298	2,15,995	93,737	6,50,919	42,69,034	49,19,953
1948-49	1,80,519	43,29,114	2,67,362	77,495	4,47,881	44,06,609	48,54,490
1951-52	5,68,383	4,41,043	4,18,951	41,089	9,87,334	4,82,132	14,69,466
1952-53	1,94,458	4,19,315	6,74,471	45,342	8,68,929	4,64,657	3,33,586
1953-54	6,32,506	...	7,18,039	...	13,50,545	...	13,50,545
1954-55	7,93,676	95,581	10,98,950	61,368	18,92,626	1,56,949	20,49,575
1955-56	5,81,210	1,96,105	19,40,750	64,600	25,21,960	2,60,705	27,82,665

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Loans advanced by the licensed moneylenders for the first two years were considerably higher than those for the later years. This was due to the precipitous decrease registered in the total loans advanced to traders by banks and companies exempted under Section 22. However, the decrease was probably more apparent than real. It may have been due, to a large extent, to the fact that banks and companies, being exempted from the obligation to furnish information about loans advanced by them to traders, may not have given these figures. Even licensed moneylenders are not bound to furnish information regarding their loan transactions with traders as they have to furnish in the case of loans to non-traders. It can, therefore, be said that the actual amount of loans advanced by licensed moneylenders to traders is possibly larger than the figures in the table indcate. The total loans advanced have increased year by year froim 1952-53 onwards. The year 1955-56 recorded a substantial increase of about 35 per cent. over the previous year 1954-55. Moreover, it should be noted that the contribution of moneylenders has been always much more than that of the banks and companies ever since 1948-49 and particularlty during 1954-55 and 1955-56.

It can thus be seen that moneylenders play an important part in the agriculture finance of the district. They will continue to play a vital role in the credit structure of our rural economy at least for the coming few years unless the co-operative movement spreads much more vigorously. Their importance is, however, gradually on the decline particularly due to the stringent legislative provisions made to regulate their activities and to help the agricultural debtors on the one hand and the gradual expansion that is taking place in the lendings of co-operative societies on the other.

AGRICULTURAL DEBTORS' RELIEF ACT

The indebtedness of the Indian farmer is proverbial. As it is rightly said, 'the Indian farmer is born in debt, lives in debt, dies in debt and bequeaths debt'. Vagaries of monsoon, uneconomic holdings of land, excessive fragmentation, illiteracy, tendency to incur unproductive expenses inevitably bring poverty and indigence to the farmers and their misery is further aggravated by the exploitative and questionable business practices of the moneylenders. Farmers often complained against and resented the attitude of such moneylenders but their resentment did not find energetic expression for a long time. In 1875 occurred what are known as the Deccan Riots; they led to the passing of the Deccan Agriculturists Relief Act in 1879. The Act aimed at reducing the aggregate indebtedness of the farmers and restrict the transfer of land from cultivators to moneylenders. This Act was later repealed and replaced by the Bombay Agricultural Debtors' Relief Act (XXVIII) of 1939. Compulsory scaling down of debts and subsequent arrangements for the repayment of the adjusted amounts in manageable instalments constitute the essence of the scheme of this Act.

Certain other changes were also introduced by this Act of 1939. The term 'agriculturist' as defined in the Deccan Agriculturists Relief Act, 1879, was found to be actually bringing into its fold not only genuine agriculturists of the cultivating class but also pseudo-agriculturists who merely happened to own land but did not cultivate it. As against this, the term 'debtor' as defined in the Bombay Agricultural Debtors Relief Act specified that the indebted person must be a holder of land and must also be cultivating land personally. Further, his income from sources other than agriculture should not exceed 33 per cent. of his total annual income or Rs. 500 whichever is greater. Again, income from land got cultivated by tenants is regarded as non-agricultural income under the Act.

The Act was amended in 1945 and again in 1947 with a view to consolidating the law for the relief of agricultural debtors and for remedying certain other defects which the working of the Act had brought to light. The Debt Adjustment Boards were dissolved and the administration of the Act was entrusted to civil courts. Minor amendments were subsequently made in 1948 and 1950.

The application of the Act has been restricted to debts not exceeding Rs. 15,000 in any individual case. According to the provisions of clause (*iv*) of sub-section (2) of section 32, the rate of interest in case of awards should not exceed 6 per cent. per annum or such lesser rate as may be notified by the State Government or the rate agreed upon between the parties when the debt was originally incurred or the rate allowed by the decree in respect of such debts, whichever is the lowest. Government fixed (in 1948-49) 4 per cent. per annum as the rate of interest for purposes of awards made under section 32 (2) of the Act. In case of awards passed in favour of Land Mortgage Banks under section 33, the bank is entitled to recover the amount due to it from the debtor together with interest at such rate as the State Government may notify in this regard. Six per cent. per annum was the rate of interest fixed by Government for purposes of awards made under section 33 (3) of the Act. However, this was raised to 7¼ per cent. under a Government Notification, dated 12th October 1953.

The Act was made applicable from 1st January, 1942, to Bulsar taluka and Pardi mahal. In 1945 the Act was amended to remove the defects which obstructed the smooth working of the Act. The provisions of the amended Act were extended, from 1st May, 1945, to selected talukas and petas *viz*. Mandvi taluka, Valod peta, Bardoli taluka, Chikhali peta and Jalalpur taluka. The rest of the area *viz*. Chorasi taluka, Olpad taluka, and Bardoli taluka, was brought under the operation of the Act from 1st February, 1947. The Act was finally made applicable to the entire district including the areas covered by the merged States of Sachin, Bansda, Dharampur etc.

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The following civil courts were entrusted with the work of disposing of applications received from debtors and creditors for the adjustment of their debts and claims:—

Name of the Civil Court	*Its Jurisdiction* (Taluka or Peta)
1. Surat	(1) Chorasi Taluka
2. Bardoli	(1) Bardoli Taluka
	(2) Mandvi Taluka
	(3) Valod Peta
3. Bulsar	(1) Bulsar Taluka
	(2) Pardi Taluka
	(3) Chikhali Taluka
4. Olpad	(1) Olpad Taluka
5. Bansda	(1) Bansda Taluka
6. Dharampur	(1) Dharampur Taluka
7. Vyara	(1) Vyara Taluka
	(2) Songadh Taluka
8. Kathor	(1) Kamrej Taluka
	(2) Mangrol Taluka
9. Navsari	(1) Navsari Taluka
	(2) Mahuva Taluka
	(3) Palsana Peta
	(4) Gandevi Peta.

TABLE No. 4

STATEMENT SHOWING THE RESULT ACHIEVED BY THE VARIOUS CIVIL COURTS IN SURAT DISTRICT DURING THE PERIOD FROM 1ST JULY. 1946 TO 30TH JUNE 1957 IN REGARD TO BOMBAY AGRICULTURAL DEBTORS' RELIEF ACT, 1947

Period 1	Number of applications disposed of 2				Amount involved in applications shown in column No. 2. 3				Amount by which debts are reduced 4	Awards taken by Land Mortgage Banks	
	On preliminary issues	By adjudicating debtors as insolvents	By passing awards	For other reasons						Number 5	Amount 6
	(a)	(b)	(c)	(d)	(a)	(b)	(c)	(d)			
					Rs.	Rs.	Rs.	Rs.	Rs.		Rs.
July, 1946 to June, 1950 ...	471	9	2,980	3,011	7,28,853	...	19,74,931	10,21,048	21,25,159	8	12,299
July, 1950 to June, 1951* ...	386	...	2,346	2,082	4,52,715	...	12,80,352	11,92,927	12,70,055	...	...
July, 1951 to June, 1952* ...	463	...	1,541	1,880	1,97,753	...	6,60,674	19,88,273	4,24,796	...	...
July, 1952 to June, 1953* ...	1	...	23	20	3,110	...	15,372	4,609	6,903	...	...
July, 1953 to June, 1954* ...	1	...	10	9	350	...	3,077	8,373	1,588	...	...
July, 1954 to June, 1955* ...	6	...	20	12	6,241	15,217	32,131	23,376	...	...	...
July, 1955 to June, 1956* ...	...	...	24	1	...	...	1,133	557	299	...	...
July, 1956 to June, 1957* ...	...	...	5	4	...	...	16,580	14,688	11,975	...	...
Total ...	1,328	9	6,949	7,019	13,89,022	15,217	39,84,250	42,53,851	38,40,775	8	12,299
Grand Total ...			15,305		96,42,340			38,40,775		8	12,299

*Figures for these years are combined figures for Surat and Dangs districts, since separate figures are not available.

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Explanations to some of the headings in the table:—

Preliminary Issues.—These are whether the person is a debtor within the meaning of the Act, and whether the amount of debt involved is less than Rs. 15,000.

Awards taken by Land Mortgage Bank.-In case the adjusted debt of a debtor exceeds half the value of his immovable property and his creditors agree to scale it down further and the debtor fails to pay the debts even then, the court will send a scheme to a local land mortgage bank embodying terms of the award for its acceptance and payment to the creditors. The bank is entitled to recover the amount specified in the award from the adjusted debtor in such instalments as the court may fix.

An analysis of the above table shows that the total number of applications disposed of by various civil courts since 1st July 1946 to 30th June 1957 was 15,305 and the total amount involved in these applications was Rs. 96,42,340. During the same period debts were reduced by Rs. 38,40,775.

The annual administration reports of the working of the Act suggest that there was a tendency amongst agriculturist debtors and creditors to settle their debts or claims amicably among themselves, without resorting to the machinery of the courts. This might be due to the desire on the part of the agriculturist debtors not to antagonise their creditors by resorting to courts, lest they would not get timely finance from them whenever required. Not only this, agriculturists with their inelastic and recurrent demand for credit, sometimes tended to abet the creditors and moneylenders in circumventing the law. In such cases the legal safeguards provided for debtors almost became a dead letter.

Effects of Debt Relief and Money-lending legislations on the credit machinery.

There is a general inclination to believe that as a result of the legislation affecting moneylending business, there has been some shrinkage of the facilities for securing credit in rural areas. This shrinkage would have been welcome had it meant non-availability of credit for unproductive purposes only. But it was reported to have affected the credit needs of the farmers for productive purposes also. Especially debtors whose cases were pending, or adjusted debtors whose debts were adjusted by the awards according to the provisions of the Bombay Agricultural Debtors Relief Act found it almost impossible to get any financial assistance from the private agencies of the rural credit structure. The very process of adjustment involved so many restrictions on the alienability of their (debtors) property that no lending agencies could be expected to be predisposed favourably towards such persons[1].

[1] *Vide* 'All India Rural Credit Survey Committee Report, Volume II, 1954, p. 124.'

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Crop Finance.

Government took a serious view of the situation resulting from the contraction of credit in rural areas and instituted the system of crop or seasonal finance. The system is primarily intended to fill in the vacuum in the credit facilities caused mainly by legislation relating to debt relief, money lending and land tenure passed during the last few years.

The advances by way of crop or seasonal finance are secured by the crops grown by debtors. These advances are essentially short-term in character and their chief object is to finance at reasonable rates of interest agricultural operations connected with the raising of crops. The principal agencies recognised for grant of crop or seasonal finance are the following :—

(i) Co-operative societies ;

(ii) Revenue department (Tagavi loans);

(iii) Grain depots ;

(iv) Persons authorised under section 54 of the Bombay Agricultural Debtors Relief Act, 1947.

In pursuance of Government policy, the crop or seasonal finance is advanced as far as possible through the co-operative societies to persons who are parties to the proceedings or awards under the Bombay Agricultural Debtors Relief Act. The following statement shows the position as regards advances of crop or seasonal finance through co-operative societies in Surat district between 1946 to 1956.

TABLE No. 5

STATEMENT SHOWING ADVANCES OF CROP OR SEASONAL FINANCE THROUGH CO-OPERATIVE SOCIETIES BETWEEN 1946 TO 1956—SURAT DISTRICT

Year	No. of applications	Amount of finance applied for	Amount advanced	Amount recovered	Amount of overdues		
					Authorised	Unauthorised	Amount of Government guarantee
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1946-47	448	23,298	23,298	19,930	...	4,424	...
1947-48	358	18,721	18,721	22,893	760	491	935
1948-49	370	24,499	24,499	22,043	...	3,707	1,224
1949-50	379	17,971	17,971	21,003	...	674	...
1950-51	217	27,789	27,789	14,102	8,905	1,009	...
1951-52	1,161	1,46,791	1,46,791	40,895	1,19,398	610	705
1952-53	3,456	3,11,703	3,11,703	1,00,411	...	...	...
1953-54	26	5,395	5,395	60,440	2,76,255	...	...
1954-55	60	67,926	30,420	3,02,800	6,300	4,942	...
1955-56	10	12,138	12,138	5,199	11,265	2,029	...

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One noteworthy feature which prominently stands out on a careful reading of the table is that co-operative societies have met the requirements of crop finance in full in all the years except for the year 1954-55 in which the amount advanced fell short by Rs. 37,506 as compared to the amount applied for. The state of recoveries was unstisfactory till 1954-55 and this is very well reflected in the considerably higher amounts of outstandings and overdues. However, the amount recovered in 1954-55 eased the position to a great extent as regards overdues which came down to Rs. 11,242 in 1954-55 from Rs. 2,76,255 in the previous year.

The amount of advances of crop finance to the adjusted debtors by way of tagai loans and through grain depots aggregated only to Rs. 49,773 for all the years from 1946 to 1955. Moneylenders (authorised under Section 54 of the Bombay Agricultural Debtors' Relief Act) did not advance any loans by way of crop finance. The fact is they did not seek authorisation under Section 54 of the Bombay Agricultural Debtors' Relief Act.

Thus the bulk of such finance is being provided by co-operative societies and to a lesser extent through tagai advances and the agency of grain depots. This is quite in tune with Government policy of making the co-operative societies the principal agency for providing crop finance to adjusted debtors. This policy has given an impetus to organisation of new co-operative societies. The Bombay Agricultural Debtors' Relief Act has thus helped to reduce to some extent the heavy and long standing debts of agriculturists.

CO-OPERATIVE SOCIETIES.

The co-operative movement, in the main, covers the growth of co-operative credit societies, multi-purpose societies, land-mortgage banks, non-agricultural credit societies and the central co-operative bank. It was in the first decade of the present century that the co-operative movement started in India. With a view to lessening the impact of the heavy burden of agricultural debts, the Co-operative Credit Societies Act was passed in 1904 which laid the foundation of the co-operative movement in various parts of the country. The first society to be registered in Surat district was Degam Co-operative Credit Society unlimited, in the year 1906, with an initial membership of 12. The pioneers of this movement saw in the Raiffeissen mode great potentiality for rural development and therefore the societies were organized on this model.

The co-operative movement began to take concrete shape in the district before the out-break of the first World War. While in 1906-07, there were only four societies with a total membership of 118, in 1911-18, the total number of societies stood at 38 with a total membership of 2,514. The working of these societies showed that there was an urgent need for starting a

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head institution which would give continuous financial help in the form of loans to these primary societies for expanding their lending business. In 1908, therefore, efforts were made to organize the much-needed central financing agency and in 1909, the Surat District Co-operative Urban Union Ltd. was formed which after some time devloped into a full-fledged central bank *viz.* the Surat District Co-operative Bank Ltd. In the intial stages, its membership was confined to individuals. In 1912, its constitution was modified so as to enroll other societies as members and to give them representation on its Board of Directors.

The working of the Co-operative Credit Societies Act of 1904, however, showed that much progerss in the growth of the co-operative movement could not be secured unless substantial finance was provided for the non-credit side of the movement. To meet this requirement, the act of 1912 was passed which made provision for expansion of non-credit activities of the primary societies. After this Act was passed, there was an appreciable increase in the number of societies, total membership, deposits and working capital as indicated in the following table :—

TABLE No. 6

Particulars		1912-13	1924-25
No. of Co-operative Credit Societies		60	144
No. of members		3,188	8,254
Deposits	Rs.	1,21,644	3,53,888
Reserve Fund	Rs.	15,010	1,09,762
Loans to members	Rs.	2,62,380	7,11,312
Working capital	Rs.	2,83,712	7,92,622

Moreover, during this brief period of 12 years, there also came into existence four production and sale societies, four urban credit societies, six purchase and sale societies, one consumers' society and two societies unions.

In 1925, co-operation became a provincial subject and the Bombay Co-operative Societies Act (VII) of 1925 was passed. The working of the Act proved very conducive to the growth of the Co-operative movement. The number of agricultural credit societies in Surat district increased to 160 by 1930.

The unfavourable impact of the depression years on the growth of the co-operative movement was only a temporary phenomenon and a few years thereafter, the movement brought within its ambit a larger area and population of the district. As late as in 1959, the co-operative institutions had covered nearly 98 per cent of the villages of the district ; the remaining two per cent are expected to be covered before the close of the

Second Five Year Plan in 1961-62. The percentage of rural population served by the co-operative institutions in 1959 came to 45% while the target to be achieved by the end of the Second Plan was fixed at 75%.

The nature and growth of agricultural co-operative credit societies, multi-purpose societies, the land mortgage bank, non-agricultural credit societies, the District Central Co-operative Bank and other types of societies in the district are described hereafter.

Agricultural Co-operative Credit Societies.

Constitution.—These societies, constituting the bulk of the co-operative credit societies, are engaged in the supply of short-term and intermediate term (not exceeding five years) finance to agriculturists. Each society has usually only a single village as its area of operation, but in some cases, hamlets and smaller villages in the neighbourhood for which it is not feasible to organise separate societies are also included in its jurisdiction. Membership is open to all residents of that area who satisfy certain conditions laid down in the bye-laws. The liability of members is unlimited.

The funds are raised both from external as well as internal sources. Loans and overdrafts from other co-operative credit societies or from financing institutions constitute the most important external source. The main internal source is the share capital.

The societies also accept savings deposits and fixed deposits for not less than six months. Savings deposits are accepted from members only on conditions laid down in the bye-laws. The rate of interest on deposits is fixed by the managing committee with the previous approval of the financing agency.

Nature of loans

Loans are granted by these societies both for agricultural and domestic purposes. They may be for a short term (not exceeding one year) or for an intermediate term (not exceeding three and in some cases five years). Short-term loans are granted for purposes of meeting expenses on seed, manure, weeding etc. Intermediate term loans are granted for two purposes, *viz.* (i) purchase of bullock carts, iron implements, etc. and for ceremonial expenses, the period of the loan being three years, and (ii) payment of old debts and works of land improvement, the period of the loan being five years.

Normal credits are fixed for each member and loans beyond this limit are not advanced to him. The total outstandings by way of loans cannot, in the case of any member, exceed ten times the amount of shares standing to his credit in the society. Loans are given mostly on the personal security of the borrower supplemented by two good sureties who are members of the

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society. The society may also take mortgage of immovable property or of crops as collateral security. Loans are given in cash but where the purpose of the loan permits and a suitable organisation exists, loans are advanced in kind.

Rate of Interest

The rate of interest charged by agricultural co-operative credit societies depends upon their financial position as also on the rate at which they borrow from the financing agency. They have taken steps to reduce the rate of interest, and to enable societies to reduce the rate of interest without loss to themselves. Government has offered various facilities by way of subsidies to meet certain expenses of the societies.

Activities other than lending.

Although these societies are primarily agencies for supplying credit, in order to increase their usefulness to their members, a few other points of contact with the economic life of the members have been provided. It is made obligatory on members to sell through a co-operative agency for sale, if any, operating in the bazar place where they usually take their produce for sale, so much of their produce as would cover in value the amount due for recovery from them. As already noted, if the purpose of the loan permits, loans may be advanced in kind. The society is also permitted to open a provident fund for its members and to contribute to it out of its profits.

It may be noted that with the introduction of the Bombay Agricultural Debtors' Relief Act and the Bombay Moneylenders Act, the agricutural co-operatieve credit societies are called upon to play a greater part in the field of rural finance.

Statistics of working.

The following table indicates the working of the agricultural co-operative credit societies in Surat district during the years 1950-51 to 1956-57.

TABLE No. 7

STATEMENT SHOWING OPERATIONS OF AGRICULTURAL CREDIT SOCIETIES IN SURAT DISTRICT.*

Year	Number of Societies	Number of Members	Loans made during the year to individuals	Loans due at the end of the year	Of which overdue	Loans held at the end of the year from		Deposits	Paid-up share capital	Reserve and other funds	Working capital	Most usual rate of interest on	
						Provincial and central Banks	Government					Lendings	Borrowings
			Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	per cent	per cent
1950-51	463	54,342	29,17,719	32,49,607	5,97,722	16,94,076	14,62,201	21,79,141	13,17,288	15,46,562	81,75,871	2 to 4-1/2	6-1/4 to 7-13/16
1951-52	462	57,272	30,81,539	44,67,837	9,70,642	24,42,640	13,31,412	22,20,551	16,42,775	17,84,650	94,22,028	2 to 4	6-1/4 to 7-13/16
1952-53	438	58.014	27,51,924	47,85,349	16,29,896	23,08,039	4,59,536	20,51,487	17,63,194	20,14,589	85,96,855	2 to 4	6-1/4 to 7-13/16
1953-54	436	58,939	44,83,550	46,44,282	14,33,376	18,45,859	69,050	20,04,136	19,60,842	22,30,264	81,10,151	2 to 4	6-1/4 to 7-13/16
1954-55	440	60,068	38,32,357	50,31,088	18,19,197	15,77,435	56,375	21,73,686	20,03,874	23,07,719	81,19,089	2 to 4	6-1/4 to 7-13/16
1955-56	431	62,295	50,99,889	55,88,980	13,34,909	20,43,741	...	26,92,577	21,39,330	24,63,997	93,39,645	...	..
1956-57	424	66,584	54,60,001	66,14,174	20,66,677	22,00,785	...	38,51,426	23,07,443	26,18,997	1,10,30,019	...	...

*Table prepared from annual Administration Reports on co-operative societies and an annual Report from the Assistant Registrar of Co-operative Societies, Surat.

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By 1953-54, the rural primaries had covered 1,824 villages out of a total of 1,948 villages *i. e.* in terms of percentage, 94 per cent. of the villages of Surat district were covered by the rural primaries. The total membership amounted to 96,948 in that year. By taking one member to represent a family of five persons, the total population coverage would amount to 4,48,740. This is roughly 26 per cent. of the total rural population of the district. Latest figures available reveal that total loans granted by the agricultural credit societies amounted to Rs. 61,10,144 as on 30th June, 1958. According to a rough estimate by the Assistant Registrar of Co-operative Societies, Surat district, the total credit demand met by the credit cooperatives come to about 80%.

Multi-purpose Societies.

In order to broaden the basis of the primary cooperative unit, the formation of multi-purpose societies is being encouraged both at Government and non-Government level. It is being increasingly felt since 1937 that a single village society should cater for as many needs of its members as possible since all these needs are interrelated. The main objects of an agricultural co-operative credit society are to educate its members in the value and use of money and to dispense controlled credit to them. In practice, however, it has been found difficult to achieve these objectives when credit is divorced from supply and sale. Hence arises the need for organising multi-purpose societies.

Functions.

The multi-purpose societies serve the rural sector in many ways. In addition to the supply of finance, they also undertake various activities for the betterment of the life of the villages such as supplying pure seeds and improved implements, saving litigation expenses by measures of arbitration, effecting consolidation of holdings, marketing the produce of the members, etc.

Government Aid.

Government has authorised the Registrar of Co-operative Societies to sanction loans to a multipurpose society undertaking construction of a godown for storing agricultural produce and other requisites to the extent of two-thirds of the cost of construction at the concessional rate of interest of 4 per cent. per annum subject to a maximum of Rs. 2,000.

A loan exceeding this sum may be granted with the prior permission of Government.

The liability of members in the case of a multi-purpose society is limited. In calculating the total amount of liability that a society can incur, in the case of a multi-purpose society specified in that behalf by the Registrar, by general or special order, a sum equal to the amounts borrowed by such society from a central financing agency for giving advances on the security of agricultural produce is deducted from the amount of the actual liability of such a society. In all other matters, such as constitution, raising

of funds, granting of loans and rates of interest, multi-purpose societies follow the agricultural co-operative credit societies.

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Working of Multi-purpose Societies.

In the following table is indicated the growth of multi-purpose societies in Surat district since 1951-52. The table indicates that there has been an appreciable increase in the number of societies, total membership, share capital, reserve and other funds, total deposits and working capital. It is significant that by 1952-53 nearly 83 per cent of the villages were covered by multi-purpose societies along with credit societies:-

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TABLE No. 8

MULTI-PURPOSE SOCIETIES IN SURAT DISTRICT

	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57
1. No of Societies	181	179	185	188	183	184
2. No. of Members	41,703	42,073	43,246	44,191	46,096	50,175
3. Paid up Share Capital (Rs.) ...	12,39,229	14,66,372	13,98,103	13,94,373	14,61,676	15,76,276
4. Reserve and other Funds (Rs.) ...	9,91,011	13,22,314	15,19,732	15,66,376	16,98,566	18,05,352
5. Total Deposits ... (Rs.) ...	12,27,149	11,77,111	11,91,056	13,67,868	18,20,724	29,36,630
6. Borrowing from Bank and others. (Rs.) ...	18,45,609	16,36,549	12,41,417	11,34,977	14,07,520	16,61,024
7. Working Capital ... (Rs.) ...	53,03,198	58,88,562	54,52,844	54,63,644	63,88,486	79,79,282
8. Total Loans outstanding (Rs.) ...	22,59,938	24,60,821	25,08,388	27,06,521	31,20,457	39,37,585
9. Overdues ... ... (Rs.) ...	5,10,051	8,07,896	8,75,986	10,70,759	7,47,180	12,12,383

Co-operative Societies and Banks
Primary Land Mortgage Banks.

Primary Land Mortgage Bank.—Land mortgage banks are specially organised and equipped to perform the essential function of providing long term credit to the cultivator. The area of operation of such a bank is generally a district or a part thereof not smaller than a taluka. The main purposes for which loans are advanced are debt redemption, adoption of improved methods of cultivation, purchase of land for development and its improvement, installation and the purchase of costly agricultural plant and machinery. Loans of not less than Rs. 400 and not more than Rs. 15,000 are given to an individual for definite objects subject in every case to the sanction of the State Co-operative Bank. Loans are granted against the security of landed property. The land offered in mortgage by the applicant should be of his absolute ownership, free from any prior encumbrances and not subject to any restrictions and alienations. Loans are given upto 50 per cent of the value of immovable property mortgaged to the bank. The period of repayment of the loan varies from 5 to 20 years.

In Surat district, there is only one land mortgage bank *viz.*, the Surat District Co-operative Land Mortgage Bank Ltd., situated at Navsari and it works as the land mortgage bank for the whole district. The following table indicates its operations for the years 1951-52 to 1956-57.

TABLE No. 9

OPERATIONS OF LAND MORTGAGE BANKS IN SURAT DISTRICT

S. No.	Particulars	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57
1.	No. of Banks	1	1	1	1	1	1
2.	No. of members	702	1,114	1,099	1,074	1,051	1,088
3.	Share capital	Rs. 1,16,950	Rs. 2,10,295	Rs. 2,10,390	Rs. 2,00,550,	Rs. 1,96,190	Rs. 1,96,982
4.	Reserve and other Funds	17,948	1,47,865	1,49,755	1,57,035	1,63,123	1,58,998
5.	Loans advanced	13,600	...	...	...	5,548	6,919
6.	Recoveries	17,824	26,886	25,515	43,927	26,777	22,889
7.	Loans due	3,22,262	4,20,160	3,94,645	3,50,718	3,29,490	3,13,519
8.	of which overdue	62,526	1,29,307	1,32,740	1,09,063	1,23,816	1,21,382
9.	Debentures subscribed	1,49,877	1,49,877	1,00,000	1,00,000	1,00,000	1,00,000
10.	Loans and deposits from Government and other sources.	1,07,521	1,40,863	1,30,038	1,22,313	87,909	1,17,841
11.	Profit	35	4,968	5,525	15,987	N.A.	N.A.
12.	Working capital	3,93,976	6,49,600	5,90,213	5,79,898	5,47,222	5,73,771

N. A.=Not Available.

CO-OPERATIVE SOCIETIES AND BANKS.

It will be noticed from Table 9 that no loans were advanced in 1952-53, 1953-54 and 1954-55 and loans advanced in subsequent two years *viz.*, Rs. 5,548 and Rs. 6,919 were too inadequate to deserve mention. The bank has been attending only to the recovery work of loans advanced. As an agency for advancing long term loans it seems to have ceased to function. The Surat District Co-operative Bank Ltd., which had a land-mortgage section specially meant for granting long term loans, has also ceased making advances on long term basis since long.

Non-agricultural Credit Societies.

These are mostly urban societies supplying credit to members who are generally traders, artisans, factory workers, salary earners, etc., residing in towns. These societies include urban banks, salary-earners societies and communal societies.

Constitution

The area of operation of a society of this type is usually restricted to a town or part of a town or even a factory or a department. Membership is open to all persons, residing within the area of operation and the liability of members is limited. No person, however, can become a member of more societies than one, without the prior sanction of the Registrar or Assistant Registrar. Capital is raised by issue of shares, accepting deposits on current, savings and fixed accounts and borrowing from the central financing agency. The limit to outside borrowing is restricted to eight times the paid-up share capital plus the accumulated reserve and building fund minus the accumulated losses.

Advancing loans to its members at moderate rates of interest is the main function of these societies. Loans are advanced on personal security, on mortgage of property or on the security of valuables pledged or produce hypothecated. Cash credits are allowed and overdrafts sanctioned on any of the securities. These societies carry on modern banking operations like issue of hundis and drafts and collections of cheques, hundis, drafts, etc. The urban credit societies and banks undertake discounting of short-dated hundis on behalf of the members. They also undertake any business approved by the Registrar by a special or general order with a view to securing better results and also to introduce and popularise better methods of production amongst its members. In Surat district there are seven urban co-operative banks and 13 urban co-operative societies, catering to the credit requirements of the urban people. Total loans granted by the urban co-operative banks amounted to Rs. 2,54,49,633 as on 30th June, 1958. In the following three tables is indicated the working of Non-agricultural Credit Societies Limited, working of Non-agricultural Credit Societies Unlimited and the Operation of Urban Co-operative Banks, since 1950-51.

TABLE No. 10

OPERATIONS OF NON-AGRICULTUREAL CREDIT SOCIETIES (LIMITED).

Serial No.	Particulars.	1950-51	1951-52	1952-53	1953-54	1954-55
1.	No. of Societies	106	104	98	98	94
2.	No. of members	21,338	23,523	24,466	26,315	26,922
		Rs.	Rs.	Rs.	Rs.	Rs.
3.	Paid-up share capital	18,51,657	21,20,955	23,57,078	25,72,398	28,98,512
4.	Deposits held	1,41,20,447	1,44,34,160	1,48,57,544	1,53,99,302	1,64,76,404
5.	Loans held from provincial or central Banks and Government.	4,52,639	5,09,550	3,26,937	2,24,755	1,71,320
6.	Reserve and other Funds	10,83,597	12,56,911	14,96,827	15,59,656	16,78,721
7.	Loans advanced	90,14,709	1,17,75,982	1,01,72,815	1,20,57,470	1,22,07,136
8.	Loans due	41,91,577	47,15,895	51,29,906	59,57,578	59,13,560
9.	Of which overdue	3,07,721	4,55,167	10,24,516	8,74,296	10,83,830
10.	Working capital	1,75,08,340	1,83,21,476	1,90,39,386	1,97,56,111	2,12,24,957

TABLE No. 11

OPERATIONS OF NON-AGRICULTURAL CREDIT SOCIETIES (UNLIMITED).

Sr. No.	Particulars	1950-51	1951-52	1952-53
1.	No. of Societies	1	1	1
2.	No. of members	29	29	29
		Rs.	Rs.	Rs.
3.	Deposits held	751	751	806
4.	Reserve and other Funds	569	569	569
5.	Loans advanced	...	...	454
6.	Loans due	879	874	1,328
7.	Working capital	1,743	1,320	1,375

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TABLE No. 12

OPERATIONS OF URBAN CO-OPERATIVE BANKS-SURAT DISTRICT

S. No.	Particulars.	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57
1.	No. of banks.	5	6	7	7	7	7	7
2.	No. of members.	5,933	6,685	76,916	7,598	7,449	7,911	8,514
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
3.	Paid-up share capital.	6,89,675	7,50,900	7,80,425	7,83,125	7,95,500	8,17,050	8,44,125
4.	Reserve and other funds.	8,65,480	9,51,050	10,97,493	11,56,531	12,27,383	12,64,897	16,48,254
5.	Deposits held.	1,25,17,188	1,27,19,211	1,31,33,722	1,36,26,639	1,40,98,543	1,64,92,667	1,70,66,483
6.	Loans advanced.	73,05,705	99,64,211	81,43,811	97,93,490	96,64,319	1,14,24,556	1,10,73,113
7.	Loans due.	27,30,727	29,68,322	31,62,527	37,37,286	35,12,035	40,21,130	47,67,682
8.	Loans overdue.	2,68,287	3,13,924	8,37,504	6,32,477	7,28,483	8,25,702	3,14,104
9.	Working capital.	40,72,343	1,44,92,106	1,50,11,640	1,55,66,295	1,66,87,014	1,85,74,614	1,95,53,862

The Central Bank is the financing agency for the primary co-operative societies of the district. It also serves as a balancing centre accepting the surplus funds of one society at a fair rate of interest transferring them to another which requires more capital than it has got.

The District Central Co-operative Bank

The Surat District Co-operative Bank Ltd. acts as the Central Bank for Surat district. It was registered in 1909 as the Surat District Co-operative Urban Union Ltd. with the object of helping and encouraging agriculture, trade and industries and to that end finance co-operative societies affiliated to it and its other members. It was developed into a full fledged central bank in 1922.

Constitution

The liability of the members of the bank is limited and its membership consists of both co-operative societies and individuals. The major portion of its working capital is derived from short-terms deposits.

Functions

Financing of agricultural credit societies within its area of operation is the main function of the bank. It also carries on banking business. It makes advances to persons who are members of the bank or allows them overdrafts in their current accounts with the bank. By section 10-A, all creditworthy agriculturists who are not members of any society dispensing credit are admitted as nominal members of the bank until they are absorbed as members of societies. They are, however, not vested with the right to vote and only petty loans on pledge of gold ornaments, agricultural and industrial produce are granted to them. In order to enable the agricultural societies to advance loans at a reasonable rate of interest to their members for agricutlural purposes the rate of interest charged on the advances made to such societies is not to exceed $4\frac{1}{2}$ per cent. Similarly the interest rate on advances to nominal members is not to exceed 7 $^{13}/_{16}$ per cent per annum. Maximum limits of loans that can be advanced to members against different securities such as personal, first mortgage of immovable property, Government securities, debentures of local bodies, trust securities, shares and debentures of joint stock companies, bullion and agricultural and industrial produce have been laid down by the bye-laws of the bank.

Membership

In 1909-10 the bank had begun with a total membership of 82 and a share capital of Rs. 5,875. Within a few years its activities expanded and there was increase in its membership, share capital, deposits, working capital etc. In 1937-38, its membership included 1,759 individuals and 225 banks and societies. The paid-up share capital and working capital stood at Rs. 3,51,200 and Rs. 44,02,455 respectively.

In 1950-51, however, membership stood at 2,966 individuals and 524 banks and societies, paid-up share capital at Rs. 8,25,340 and working capital at Rs. 2,34,81,525. The working and progress of the bank after 1951-52 are indicated in the following table.

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TABLE No. 13

OPERATIONS OF SURAT DISTRICT CO-OPERATIVE BANK LTD.

Particulars.		1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
1. No. of members	Individuals ...	3,310	3,550	3,699	3,882	4,426	4,397	4,451
	Societies ...	586	618	635	647	665	679	692
2. Paid-up share capital		Rs. 8,30,840	Rs. 8,33,000	Rs. 8,35,560	Rs. 8,41,980	Rs. 8,44,560	Rs. 8,44,680	Rs. 8,46,300
3. Reserve and other funds		12,81,776	15,18,692	16,74,989	16,44,305	17,39,694	21,14,629	23,79,125
4. Total Deposits		1,79,03,298	1,93,85,894	2,36,93,241	2,67,73,842	3,50,56,505	3,20,23,274	2,53,65,167
5. Working capital		2,37,08,220	2,16,72,420	2,60,94,293	2,96,40,127	3,76,40,759	3,49,82,583	2,85,43,719
6. Investment including fixed deposits in banks.		1,00,35,063	90,26,228	1,06,28,021	1,13,72,937	1,28,85,232	2,35,47,649	1,00,29,017
7. Total loans advanced		4,83,81,981	1,53,19,316	1,45,01,070	1,59,16,186	1,86,78,670	2,45,22,815	3,46,21,407
8. Total loans out-standing		1,13,30,124	71,52,907	63,25,883	58,53,290	60,27,895 B.S.32,409	96,92,743 B.S.	1,63,08,624
9. Recoveries		4,83,49,012	1,94,96,535	1,53,56,375	1,63,88,779	1,84,91,787 B.S.21,48,614	2,08,57,967 B.S.	2,80,05,528
10. Overdues		24,46,360	15,01,065	23,42,151	23,13,137	19,03,194	29,71,475	N.A.

CO-OPERATIVE SOCIETIES AND BANKS.

In 1958, the Bank had 15 branches serving the banking and credit needs of the 18 talukas of the district. They were—

1. Bulsar City Branch
2. Bulsar Station Branch
3. Bardoli Branch.
4. Jalalpore Branch.
5. Chikhali Branch.
6. Amalsad Branch.
7. Mandvi Branch.
8. Madhi Branch.
9. Dharampur Branch
10. Olpad Branch.
11. Bansda Branch.
12. Kosamba Branch.
13. Billimora Branch.
14. Vyara Branch
15. Songadh Branch.

Recently the bank was called upon to finance two important projects. The first one was the formation of two co-operative sugar factories and the other was the pilot scheme for paddy cultivation by Japanese method. Both the projects received substantial financial accommodation from the bank. The Bardoli Sugar Factory, besides being granted working finance of about Rs. 30 lakhs, was given an interim loan to the tune of Rs. 47.5 lakhs for purchase of machinery etc. It has been given an additional loan of Rs. 7.5 lakhs which is guaranteed by Government. Letters of credit have also been opened for the factory and other societies on the Bank's guarantee to facilitate the import of various goods and capital equipment required by them. On this account, bills amounting to Rs. 4,94,487 were required to be paid in 1957-58 The Bank granted advances to 65 societies to the tune of Rs. 4,23,840 upto July 1958 for the pilot scheme of paddy cultivation by Japanese method. It will be seen from the Table No. 13 that there has been a considerable expansion in the Banks' advances. Almost the entire expansion is accounted for by the borrowings of societies, individuals receiving only a marginal share of it.

Other types of societies

As stated at the outset the cooperative movement comprises different types of societies. In the foregoing pages. the role of cooperative societies whose primary function is to dispense credit has been described. Other types of societies e. g. sale societies, better farming societies. lift irrigation societies, purchase and sale societies which are agricultural societies and others e.g. consumers' societies. housing societies, fisheries societies which are non-agricutural in charactor, help to pool the resources, financial as well as otherwise. of the people of the district served by them and channelse the funds for financing the particular activities with which they are primarily concerned. To that extent their role in financing those activities becomes important.

The relevant statistical information pertaining to these societies is furnished in the following tables:

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TABLE No. 14

POSITION OF MISCELLANEOUS SOCIETIES (AGRICULTURAL) AS IN THE YEAR 1956-57

Surat District

Type of Society.	Number of Societies.	Number of Members.	Paid up share capital.	Deposits held.
			Rs.	Rs.
Marketing and Supply	16	6,103	3 23,772	2,91,959
Single Commodity	23	10,982	3,58,317	18,69,982
Co-operative Farming	30	1,968	95,236	—
Better Farming .. .	1	34	7,850	--
Lift Irrigation	12	604	72,305	—
Dairy	4	1,773	67,843	2,46,733

TABLE No. 14 (contd.)

Type of Society.	Working capital.	Loans from Government	Loans from Other sources including Central Financing Agency.
	Rs.	Rs.	Rs.
Marketing and Supply	12,69,129	—	—
Single Commodity	29,92,440	—	—
Co-operative Farming	8,88,381	4,08,499	1,94,257
Better Farming	26,332	5,570	3,061
Lift Irrigation	5,33,429	1,28,682 } *1,11,208 }	38,917
Dairy	5,26,920	—	54,763

* Subsidies

TABLE No. 15

POSITION OF MISCELLANEOUS SOCIETIES (NON-AGRICULTURAL) AS IN THE YEAR 1956-57

Type of Society.	Number of Societies.	Number of Members.	Paid-up Share Capital.	Government Loan.	Working Capital.
			Rs.	Rs.	Rs.
Fisheries	6	1,809	38,665	—	94,976
Consumers	27	4,990	—	—	4,93,293
Housing	177	6,443	4,39,772	2,89,240	16,53,516

Co-operative Sugar Societies

The establishment of the Shri Khedut Sahakari Khand Udyog Mandali Ltd. at Baben in Bardoli taluka in 1955 marks an important development in the progess of co-operative movement in the district in as much as it provides an example of the possible extent of the scale on which the co-operative experiment could be undertaken and worked out successfully. This development is significant also from the view-point of the active support of the Government accorded to this society. The society which was registered in February, 1955 with an authorised capital of Rs. 50 lakhs, had Rs. 30,26,000 as paid-up capital which included Rs. 10 lakhs as the contribution of the Government. The society has taken loans to the tune of Rs. 56,66,064.81, of which Rs. 32,88,000 were supplied by the Industrial Finance Corporation of India and the remaining Rs. 23,78,064.81 were granted by the Surat District Co-operative Bank Ltd. In 1957, it had 1481 members, of whom 1431 were Producer-members.

Another sugar society is the Khedut Sahakari Udyog Mandli Ltd., Gandevi, registered on 30th July, 1956. It has collected a share capital of Rs. 10,07,375 and goverment contribution to the share capital is Rs. 8 lakhs.

Agencies for mobilisation of savings.

Besides various credit agencies whose nature, functions and operations have been described at some length in the foregoing sections, there are certain other agencies which are engaged in tapping the savings of the people. Such agencies include insurance companies and societies and the recently constituted Life Insurance Corporation of India, branch-offices of Joint Stock Banks, Post Office Savings Banks and other agencies conducting the savings campaign and collection drive etc.

Post-Office Savings Banks

The Post Office Savings Banks constitute by far the most important source for small savings, which is being extensively used for mobilising the savings of people of small means. They are particularly suited for collection of savings in rural areas where there are no banking facilities available. Moreover, as

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an agency of the Government, they enjoy confidence of the people. They provide a large network of offices spread out widely in the country and are also capable of being developed without considerable expense. Savings Bank activity constitutes one of the many functions of the post-offices and can therefore be carried on economically which is rather not possible in case of other banking institutions.

Surat district possesses an extensive net-work of post-offices spread over the entire district. In 1957, there were 192 offices of all types doing savings bank work in the district. These included a head post office at Surat, 69 Sub-Offices and 122 branch offices.

The following table sets out the changes in the total number of accounts excluding those closed and trasferred, in the savings banks and the total amounts invested as well as withdrawn as at the end of each financial year since 1950-51.

TABLE No. 16

POST OFFICE SAVINGS BANKS ACCOUNTS, SURAT DISTRICT.

Year	Total No. of accounts	Total amount invested	Total amount withdrawn
		Rs. As. Ps.	Rs. As. Ps.
1950-51 ..	54,286	1,12,54,493- 2- 4	N.A.
1951-52 ..	56,782	1,23,22,785- 3- 6	N.A.
1952-53 ...	56,685	1,12,18,081- 0- 4	N.A.
1953-54 ..	64 143	1,19,75,166-14- 9	N.A.
1954-55 ..	51,223	1,37,51,298- 3- 6	1,18,44,162- 7- 3
1955-56 ..	52,167	1,49,21,468- 9- 0	1,21,63,253- 9-11
1956-57 ..	62,164	1,84,36,361- 4-11	1,61,90,305- 8- 9

Looking to the total number of accounts in the Post-Office Savings Banks, it appears that numerous persons are availing themselves of this facility. Taking one account to represent family of five persons in general, 62,164 accounts in 1957 mean that more than 3,00,000 persons i.e., nearly 1/6th of the total population of the district took advantage of this banking facility provided by the post offices. Total investments were substantial but were counter balanced by large withdrawals reflecting the prevalence of general poverty in the population and persistent pressure on the already low level of savings. Possibly part of the withdrawals are due to increased use of Post-Office Savings Banks accounts in a way similar to that of the current accounts in the Joint Stock banks. However, it is envisaged

that with the rising tempo of economic development and increasing incomes under the impact of growing investment outlays, the savings banks will be called upon to play a greater and more effective role in mobilising the enlarged savings potential of the people.

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Small Savings Schemes

Apart from the agency of post-office savings banks which tap small savings to a considerable extent, there are other schemes sponsored by Government for tapping the savings potential of all strata of population by offering different sets of terms and facilities to suit their needs. These include the National Savings Certificates, National Plan Savings Certificates, Treasury Savings Deposits Certificates, 15-Years Annuity Certificates etc.

Small savings drive has assumed new importance in view of the fact that small savings have been assigned a dynamic role as an important source of finance required for the implementation of our Five Year Plans. These schemes not only give an opportunity to the common man to be associated with the planned development of the country, but affords good scope for saving on a small scale.

The small savings experiment was launched during the period of world-war II firstly to prevent adverse effects of inflation by withdrawing from the people a part of their increased purchasing power and secondly as an additional source of war-finance. However, Government saw in it great potentialities of being developed into a substantial source of financing the Plans. Government have therefore launched a campaign to popularise various small saving schemes as a mass movement and thereby promote the habit of thrift among the people.

Historically speaking, however, the commencement of these schemes dates as far back as world war I. During that war the then Government initiated the National Savings Scheme through the issue of Postal Cash Certificates. These certificates had a maturity period of five years and were sold at a discount and repaid after the completion of maturity at par i. e. Rs. 10,50, or 100 as the case may be.

This scheme continued for some years even after the first world war was over. Subsequently during world war II, Government started the scheme of Post-Office National Savings Certificates in 1943. With the introduction of 12 Year National Plan Savings Certificates with effect from June 1957, the sale and issue of these certificates were discontinued. The new series of 12 Year National Plan Savings Certificates fetched simple interest at the rate of 4 1/6 per cent on maturity i. e. Rs. 100 become Rs. 150 at the end of 12 years. These were encashable even before maturity except for an initial period

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of 18 months during which these were not encashable. There was a schedule of a graded scale of interest charges payable for encashment effected prior to full maturity period, according to which, the longer the period for which the certificates are held, the higher is the rate of interest earned on them. The interest thus earned on the certificates was free of income-tax. Thereafter, Government also introduced five and seven years series which were encashable though at lower rates of interest whenever the purchaser was in need of money. They fetched interest at the rate of 3 per cent and 3 4/7 per cent respectively at full maturity.

The following statement shows the amounts of savings invested in the certificates of varying maturity and the corresponding amount withdrawn during the last four years in the district.

TABLE No. 17

Year	Investments (Rs.)			Withdrawals (Rs.)		
	5 years	7 years	12 years	5 years	7 years	12 years
1953-54	7,115	21,180	82,86,940	1,20,184	21,641	17,77,944
1954-55 ..	..	19,660	72,14,595	1,03,305	5,332	22,27,003
1955-56 .	..	23,830	65,15,115	66,255	42,466	20,47,962
1956-57	...	8,380	74,98,175	15,891	53,974	36,74,116

It is clear from table that the 12-Year Certificates were the most popular and the amounts invested in them were by far the largest.

12 Year National Plan Savings Certificate.

As said earlier, a new series of 12-Year National Plan Saving Certificates was introduced from June 1, 1957 replacing all the earlier series including the National Savings Certificates of varying maturity periods and the 10-Year National Plan Certificates.

The introduction of the new series marked the beginning of a new phase in the intensification of the drive for mopping up increased savings resulting from rising incomes generated by the impact of huge investment expenditure that is being incurred under the Five Year Plans.

The new certificates carry a higher rate of interest yielding on maturity a return of 5.4 per cent per annum simple interest and 4.25 percent per annum compound interest free of income-tax. An investment of Rs. 100/- in the new certificates will accumulate to Rs. 165/- after 12 years as compared to Rs. 150/- on the former 12-Year National Savings Certificates. The surrender value of the certificates, if encashed prematurely, will be Rs. 115 at the end

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of five years, Rs. 127 at the end of seven years and Rs. 148 at the end of 10 years. The new certificates will be encashable at any time after the completion of one year from the date of issue. The former 12-Year National Saving Certificates had a non-encashability period of 18 months. The Government of India has permitted pledging of these certificates with the scheduled banks and co-operative societies and banks in order to enable the small savers to get temporary accommodation in case of need without encashing their certificates prematurely. The certificates are sold at all post-offices conducting savings bank business in denominations ranging from Rs. 5 to Rs. 5000.

The 10 Year Treasury Savings Deposits Scheme.

This is yet another scheme for attracting small savings from the public. It was started in 1951.

These are available at the Reserve Bank of India, branches of the State Bank of India doing treasury work and treasuries and sub-treasuries. The deposits are repayable at par on the expiry of ten calender years from the date of deposit and till June 1957 the rate of interest allowed on them was 3½ per cent per annum. The same was raised to 4 per cent from the said date. Interest is paid annually on the completion of each period of twelve calender months from the date of deposit.

The certificates can be pledged with the scheduled banks and co-operative societies and banks to secure advances against them thus enabling the small savers to tide over temporary difficulty without encashing them prematurely.

The following statement shows the amount invested in and withdrawn before maturity from this type of deposit scheme.

TABLE No. 18

Year	Amount invested	Amount withdrawn before maturity
	Rs.	Rs.
1952-53	1,48,900	20,000
1953-54	1,66,300	9,900
1954-55	3,18,600	77,000
1955-56	1,66,800	23,500
1956-57	1,62,700	25,500
(up to November 1956)		

15 Year Annuity Certificates.

Investment in this scheme serves two purposes. It provides a safe, secure and a profitable avenue for a lump sum investment of accumulated savings of a person and also ensures a regular monthly

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income to him and his dependants in the from of fixed monthly instalments for a period of 15 years from the date of issue of the certificates. The amount invested in these certificates is returned together with a compound interest of 3½ per cent per annum in the form of monthly instalments lasting for 15 years. The issue of certificates under the first series was discontinued from the close of business on December 30, 1957 and a new series of 15 Years Annuity Certificates was introduced from January, 1958 as part of the Government policy of popularising the small savings scheme by offering more liberal and advantageous terms and facilities to the prospective investors.

An amount of Rs. 21,000 was invested in these certificates till the beginning of 1957.

Agencies doing Insurance business.

With the nationalisation of life insurance business, the Life Insurance Corporation of India has become the foremost and the largest single agency doing life insurance business in India. The Corporation was constituted by passing the Life Insurance Corporation Act of 1956 and was officially established on 1st September 1956 by the Government of India. From this date, all Indian insurers and provident societies and all foreign insurers ceased to carry on life insurance business anywhere in India. (The existing life insurance business of foreign insurers has been vested in the Corporation). However, general insurance which includes fire, marine, accident and other insurance business is kept open to private enterprise. Most of the former insurance companies and societies which used to transact all insurance business including life, have now switched over entirely to general insurance business only. Many of these companies which had life insurance business as the main business have ceased to exist consequent upon the nationalisation of life insurance business.

Working of the Life Insurance Corporation in the district.

Under the new organisational and administrative set up of the Life Insurance Corporation, Surat District is placed under the territorial jurisdiction of the Surat Division of the Western Zone together with Broach and Baroda districts. There were three branch offices of the Corporation in Surat Division, of which two were located in Surat District itself viz., one each at Surat and Navsari. The number of agents canvassing insurance business in the district which was 1856 on 31st December 1956 rose to 2,190 by August 1957. Total business proposed and completed from 1st September 1956 to 31st August 1957 amounted to Rs. 2,54,73,250 and Rs. 2,05,88,250 respectively.

Before the setting up of the Life Insurance Corporation, there was one life insurance society viz. The Gujarat Parsi Co-operative Insurance Society Ltd., working in the district. It was registered in 1891. There were in all 287 policies issued by the society in force as on December 31, 1955 and the net total business of the sum insured including the bonuses aggregated to Rs. 2,82,000 on the same date.

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The Directorate of Small Savings set up by the Government of Bombay to intensify the small savings collection drive fixed up district-wise annual targets of small savings collections for each of the districts of the State on the basis of (1) actual net collections during 1955-56, (2) quantum of urban population and (3) conditions of agricultural prosperity. The net collections target fixed for Surat district was Rs. 1,25,00,000. The figures of actual gross and net collections in small savings in the district for the period from April 1957 to February 1958 were Rs. 2,94,53,000 and Rs. 69,97,000 respectviely.

JOINT STOCK BANKS

There were nineteen offices of joint-stock banks in Surat district in the year 1958. Of these, only one bank, namely, the Surat Banking Corporation Ltd., had its registered office in the district while all others were branch-offices of the banks which had their registered offices outside the district. The names of the banks, their location and their year of establishment are given below.

	Name.	*Place of Location.*	*Year of Establishment.*
1.	The Bank of Baroda Ltd.,	Surat	1912
2.	The Bank of Baroda Ltd.,	Navsari	1911
3.	The Bank of Baroda Ltd.,	Navsari Station	1950
4.	The Bank of Baroda Ltd.,	Vyara	1938
5.	The Bank of Baroda Ltd.,	Bilimora	1938
6.	The Bank of India Ltd.,	Surat	1931
7.	The Central Bank of India Ltd.,	Surat	1931
8.	The Devkaran Nanjee Banking Company Ltd.,	Bardoli	1948
9.	The Devkaran Nanjee Banking Company Ltd.,	Bulsar	1945
10.	The Devkaran Nanjee Banking Company Ltd.,	Navsari	1945

	Name.	Place of Location.	Year of Establishment.
11.	The Devkaran Nanjee Banking Company Ltd.,	Surat	1944
12.	The Punjab National Bank Ltd.,	Surat	1944
13.	The State Bank of India Ltd.,	Surat	1955
14.	The State Bank of India Ltd.,	Navsari	1955
15.	The State Bank of India Ltd.,	Bulsar	1957
16.	The Union Bank of India Ltd.,	Surat	1949
17.	The United Commercial Bank Ltd.,	Surat	1944
18.	The United Commercial Bank Ltd.,	Navsari	1948
19.	The Surat Banking Corporation Ltd.,	Surat	1934

Trends in the banking operations in the district :—

The total deposits held by the commercial banks in the district in the year 1956 amounted to Rs. 11,27,43,496 of which Rs. 4,57,72,731 represented fixed deposits. The preponderance of fixed deposits, which account for 40 per cent of the total deposits, reflect to a certain extent a lack of enterprise on the part of the depositors in so far as the money instead of being utilised for financing some kind of economic activities is shut-up in these deposits, which are generally of a long-term nature, earning higher rate of interest. The total deposits held by the banks disclose an upward trend in the recent years. This is an indication both of the greater savings potential of the people and the growing banking habit among them. Figures of various types of deposits in detail are given in table No. 19.

The position as regards their advances shows that there has been considerable expansion in their loan operations. In the year 1952, the total advances of these banks were estimated to be around Rs. one crore. The same rose to Rs. 1,97,61,510 in the year 1956 representing a phenomenal rise of nearly 100

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per cent over a period of four years. This is a clear indication of the increasing role played by the joint stock banks in financing various economic activities in the district. It can further be noted (*vide* table No. 20) that as much as Rs. 1,09,22,863 or 55 per cent of the total advances had gone to the industrial sectoɪ of the economy. The industrial development of the district has been greatly facilitated by the credit made available to the industrial concerns by the commercial banks. Agricultural sector continues to be neglected by the banks. A meagre sum of Rs. 76,000 was advanced for agricultural purposes. It has been a traditional practice with the banks not to finance agricultural operations and accept agricultural land as security. Co-operative societies and money lenders are the two agencies which cater to the credit requirements of the rural population.

An examination of table No. 21 will show that 91.8 per cent of the advances were secured. Nearly 40 per cent of the total advances were given against the security of non-agricultural commodities and nearly 25 per cent against the security of shares and debentures of joint stock companies. It was remarkable that no advances were made against the security of agricutlrual land, the advances made against other forms of real estate were negligible.

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TABLE No. 19

CONSOLIDATED TABLE OF ALL THE BRANCHES OF JOINT STOCK BANKS IN SURAT DISTRICT

OWNERSHIP OF DEPOSITS

Deposits of	Rs. 50,000 and above		Between Rs. 10,000 and Rs. 50,000		Between Rs. 5,000 and Rs. 10,000		Between Rs. 1,000 and Rs. 5,000		Between Rs. 500 and Rs. 1,000		Rs. 500 and below		TOTAL	
	No. of Accounts	Amount	No. of Accounts	Amount	No. of Accounts	Amount	No. of Accounts	Amount	No. of Accounts	Amount	No. of Accounts	Amount	No. of Accounts	Amount
A. *Fixed Deposits*														
1. Business	40	77,55,196	132	26,03,511	61	3,61,454	47	1,19,046	2	1,000	...	..	282	1,08,40,207
2. Personal	32	42,40,560	856	1,34,23,719	983	66,80,286	1,614	42,84,068	404	3,37,900	263	62,500	4,152	2,90,29,024
3. Public Institutions and Trusts. ..	13	29,69,517	19	4,97,851	13	84,006	..	...	...	..	...	..	47	35,56,000
4. Others	7	17,97,600	15	3,41,800	13	54,179	18	69,500	2	15,000	...	..	56	23,93,500
Total	92	1,67,62,873	1,022	1,68,66,872	1,070	71,79,925	1,679	44,72,614	408	3,53,900	263	62,500	4,627	4,57,72,731
B. *Current A/c. Deposits*														
1. Manufacturing Concerns. ..	8	8,70,817	65	14,06,629	81	4,99,233	263	6,05,345	112	75,714	351	80,029	882	35,38,367
2. Trading Concerns ..	19	19,81,343	194	36,32,202	251	17,06,786	912	21,99,901	511	3,85,647	1,774	5,22,087	3,661	1,04,27,966
3. Personal	14	11,88,000	198	38,20,045	313	20,46,432	1,104	24,25,446	634	4,90,737	2,749	4,93,931	5,002	1,04,74,591
4. Banking Companies. ...	16	27,09,300	25	6,15,050	12	1,47,297	13	81,852	7	5,374	1	300	74	34,66,773
5. Others	18	18,62,400	88	19,19,928	59	4,62,874	187	4,82,601	89	67,577	355	84,700	796	48,80,580
Total	75	86,11,860	570	1,14,03,854	716	48,62,622	2,479	57,95,145	1,353	10,25,049	5,230	11,81,047	10,415	3,27,88,277

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C. *Saving A/c. Deposits*														
1. Business	..	..	...	..	...	...	1	1,253	...	.	...	...	1	1,253
2. Personal	1	85,300	295	40,83,100	1,176	74,98,752	6,732	1,41,40,806	4,327	34,27,947	2,7372	27,97,692	39,902	3,19,19,344
3. Banking Companies. ...	...	...	...	...	..	...	..	...	...	...	...	...	...	...
4. Others	...	...	...	...	18	88,280	44	1,03,790	37	39,027	657	98,135	756	3,29,232
Total	1	85,300	295	40,83,100	1,194	75,87,032	6,777	1,42,45,849	4,364	34,66,974	28,029	28,95,827	40,659	3,22,49,829
D. *Other Deposits.*														
1. Manufacturing Concerns. ...	1	53,000	2	43,564	2	13,233	...	...	1	533	1	969	15	11,299
2. Trading Concerns	1	3,30,000	9	1,32,000	3	22,100	9	29,830	1	500	...	...	23	5,14,430
3. Personal	...	...	8	1,72,117	18	1,34,859	70	1,45,220	28	26,284	104	24,147	228	5,02,627
4. Banking Companies. ..	2	5,52,100	7	1,11,000	24	1,61,400	30	67,000	7	4,900	...	...	70	8,96,400
5. Others	...	...	...	..	...	...	3	4,522	3	2,615	12	766	18	7,903
Total	4	9,35,100	26	4,58,681	47	3,31,592	113	2,46,572	40	34,832	117	25,882	354	19,32,659
Total Deposits														
1. Manufacturing Concerns. ...	9	9,23,817	67	14,50,193	83	5,13,066	265	7,49,345	113	76,247	360	80,998	897	36,49,666
2. Trading Concerns	20	23,11,343	202	37,64,202	254	17,28,886	921	22,29,731	512	3,86,147	1,774	5,22,087	3,684	1,07,26,396
3. Personal	48	55,65,960	1,363	2,15,94,872	2,564	1,65,21,729	9,520	2,09,95,540	5,393	42,82,868	3,04,488	33,78,270	49,284	7,19,25,586
4. Banking Companies. ...	17	32,09,300	27	6,90,050	12	87,297	13	49,452	7	5,374	1	300	77	40,41,773
5. Business	40	77,55,196	132	26,03,511	61	3,61,454	48	1,20,299	2	1,000	...	...	283	1,08,41,460
6. Public Institutions and Trusts. ...	13	29,69,517	21	4,97,851	13	90,500	...	...	...	...	...	...	47	35,57,868
7. Others	25	36,60,000	102	22,11,728	90	6,84,254	253	6,60,413	131	1,70,719	1,124	1,83,601	1,625	75,11,275
Total	172	2,63,95,133	1,914	3,28,12,507	3,077	1,99,87,186	11,020	2,48,04,780	6,158	49,22,355	3,07,747	41,65,256	55,897	11,27,43,499

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TABLE No. 20

ANALYSIS OF ADVANCES OF SCHEDULED AND NON-SCHEDULED BANKS ACCORDING TO PURPOSE

	Year ended 1956.		
	Number of Accounts.	Amount. Rs.	Percentage to total advances.
I. Industry	265	1,09,22,863	55.3
II. Commerce ...	489	58,08,959	29.0
III. Agriculture ...	5	76,000	0.4
IV. Personal and Professional.	749	29,50,688	14.9
V. All others ...	14	3,000	—
Total ..	1,522	19,76,510	100.0

TABLE No. 21

ANALYSIS OF ADVANCES OF SCHEDULED AND NON-SCHEDULED BANKS ACCORDING TO SECURITY

	Year ended 1956		
	Number of Accounts.	Amount.	Percentage to total advances.
I. *Secured Advances*—		Rs.	
(1) Govt. & Trustee securities	45	5,00,200	2.5
(2) Shares and debentures of Joint-Stock Companies etc.... ...	526	48,14,700	24.4
(3) Gold and Silver Bullion, Gold and Silver ornaments.	416	3,23,952	1.6
(4) Merchandise :—			
(*a*) Agricultural Commodities.	14	7,80,165	3.9
(*b*) Non-agricultural Commodities.	186	78,78,594	39.9
(5) Real Estate :—			
(*a*) Agricultural Land	—	—	—
(*b*) Other properties	20	1,90,000	0.9
(6) Fixed Deposits	27	1,11,906	0.6
(7) Other secured advances	136	35,62,378	18.0
Total	1,370	1,81,61,895	91.8
II. Unsecured Advances	152	15,99,615	8.2
Total of I and II ...	1,522	197,61,510	100.0

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Financial Assistance to Agriculture.

Financial assistance is given to agriculturists by the State in the form of *tagai* loans. The legal framework is provided by two well-known legislative measures. The Land Improvement Loans Act of 1883 and the Agriculturists' Loans Act of 1884, under which these loans are granted. The former is broadly concerned with long-term finance and the latter with short-time accommodation. It is these parent Acts or their derivatives and variants, together with the rules under each of the Acts, which determine and indicate the extent and nature of the credit dealings of the State Government with the Agriculturists.

Under the Land Improvement Loans Act, long-term loans are advances to cultivators for permanent improvements to land which add to its letting value, such as the construction of wells, the preparation of lands for irrigation, protection of lands from flood or erosion, etc.

The Collector, Prant Officer, and Mamlatdar or Mahalkari are the authorities specified in the Bombay Land Improvement Loans Rules, 1916, who may grant loans and exercise functions of a Collector under the Act. The extent to which these authorities can grant loans under the Act is specified as follows :

Authority	Miximum Amount per loan (Rs.)
1. Collector	7,500
2. Prant Officer	2,500
3. Mamlatdars (specially selected by Collectors).	2,500
4. Mamlatdars or Mahalkaris	1,000

The provisions as to the securities to be taken against these loans are laid down by sections 8 to 10 of the Rules. The grantor, whoever he may be, has to satisfy himself as to the sufficiency of the security with a margin of safety. When the value of the applicant's interest in the land to be improved clearly covers the amount of the loan with interest and the cost (if any) likely to be incurred in making the same, no collateral security is required. Moveable property is rarely accepted as security. Personal security may be accepted, even that of one person, provided that his solvency is certain. When the amount of a loan is large the security of immovable property is almost invariably demanded.

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Under the Agriculturists Loans Act short-term and medium term loans are granted for current agricultural needs such as purchase of seed, grain, cattle, and agricultural stock and implements, for rebuilding houses destroyed by fire, flood etc. and for the relief of distress in areas affected by famine.

Loans are granted under this Act by the following authorities and to the extent specified in the following table :—

Authority	Maximum Amount per loan (Rs.)
1. Collector	2,500
2. Prant Officer	1,000
3. Mamlatdar (specially selected by the Collector)	500
4. Mamlatdar or Mahalkari	200

Higher loans (i.e. cases involving amounts exceeding Rs. 2,500) have to be referred to Government for approval.

Movable property is rarely accepted as security. Personal security may be accepted even that of one person, provided that his solvency is certain. When the amount of loan is large, the security of immovable property is almost invariably demanded. The following six tables show the extent and nature of Government finance to agriculture.

TABLE No. 22

TABLE SHOWING GOVERNMENT FINANCE FOR AGRICULTURE.

Particulars	1954-55		1955-56		1956-57	
	Loans under Land Improvement Act, 1883	Loans under Agriculturists Loans Act, 1884	Loans under Land Improvement Act, 1883	Loans under Agriculturists Loans Act, 1884	Loans under Land Improvement Act, 1883	Loans under Agriculturists Loans Act, 1884
1	2	3	4	5	6	7
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1 Applications pending at the beginning of of the year ..	91	107	75	50	61	28
2 Amount involved in (1) above	2,08,000	89,000	90,000	39,000	1,09,225	58,975
3 Number of applications received during the year	237	483	187	291	172	237
4 Total amount applied for by these applications .	3,55,500	1,38,100	3,74,500	2,03,700	3,41,800	1,68,650
5 No. of applications sanctioned	58	93	57	76	58	82
6 Total amount asked for in (5) above	75,400	58,100	1,64,500	93,200	103,500	83,950
7 Total amount actually sanctioned	1,00,803	1,05,723	83,980	86,040	56,877	67,105
8 Total amount actually disbursed during the year .	1,00,803	1,05,723	83,980	86,040	56,877	67,105
9. Total loans repaid during the year	—	7,850	2,500	5,885	—	8,910

Note.—The amounts under the heads Financial assistance under Grow More Food Campaign, Any other loans (for Project Area), and Financial assistance by other Government departments, for the year 1954-55, 1955-56 and 1956-57 were *Nil*.

TABLE No. 23

GOVERNMENT FINANCE FOR AGRICULTURE CLASSIFIED ACCORDING TO PURPOSE.

Particulars	1954-55		1955-56		1956-57	
	Loans under Land Improvement Loans Act, 1883	Loans under Agriculturists Loans Act, 1884	Laons under Land Improvement Loans Act, 1883	Loans under Agriculturists Loans Act, 1884	Loans under Land Improvement Loans Act, 1883	Loans under Agriculturists Loans Act, 1884
1	2	3	4	5	6	7
	Rs	Rs.	Rs.	Rs.	Rs.	Rs
1. For Current farm expenditure						
(a) Seed	—	26,300	—	19,040	—	11,550
(b) Fodder	-	11,180	—	—	—	1,750
(c) Manure	-	22,550	—	24,500	—	27,565
(d) Farm implements	--	28,586	--	31,255	—	21,500
2. Purchase of draught animals	—	17,107	—	11,245	—	4,740
3 Well digging and other irrigation projects	29,500	—	21,900	-	8,500	—
4 Land Improvement	71,303	-	62,080	--	48,377	--
5 Consumption	--	—	—	—	—	--
Grand Total	1,00,803	1,05,723	83,980	86 040	56,877	67,105

Note.—The amounts under the heads Financial assistance under Grow More Food campaign Any other loans (for Project Area), and Financial assistance by other Government departments, for the years 1954-55, 1955-56, and 1956-57 were *Nil*.

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TABLE No. 24

TABLE SHOWING THE TIME LAG BETWEEN THE DATE OF APPLICATION AND THE DATE OF SANCTION.

Particulars	1954-55			1955-56			1956-57		
	Number of Applications.	Amount Applied for	Amount sanctioned for	Numuer of applications	Amount Applied for	Amount sanctioned for	Number of applications	Amount Applied for	Amount sanctioned for
1	2	3	4	5	6	7	8	9	10
		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.
1. On the same day ...	—	—	—	—	—	—	—	—	—
2. Less than one month ..	213	2,27,500	30,385	188	1,85,850	42,500	76	1,11,100	11,500
3. 1-2 Months	429	3,80,550	77,500	137	2,07,580	26,750	50	82,025	10,082
4. 2-3 Months	118	1,25,125	51,680	90	95,500	14,020	109	1,00,800	28,650
5. 3-4 Months	68	55,740	28,461	52	41,780	12,000	98	1,32,500	22,000
6. 4-5 Months	37	87,355	6,500	77	77,500	23,750	87	1,05,720	17,750
7. 5-6 Months	29	61,380	4,000	23	31,790	17,800	41	53,755	10,000
8. 6-7 Months	6	9,500	8,000	18	21,000	6,000	20	40,500	13,500
9. 7-8 Months	11	27,300	—	13	28,700	12,700	12	32,750	6,000
10. Over 8 months	7	16,150	—	7	17,500	14,500	7	19,500	4,500
11. Not ascertainable	—	—	—	—	—	—	—	—	—
Total	918	9,90,600	2,06,526	605	7,07,200	1,70,020	500	6,78,650	1,23,982

TABLE No. 25

TABLE SHOWING THE TIME LAG BETWEEN THE DATE OF SANCTION AND THE DATE OF DISBURSEMENT

Time lag between date of sanction and date of disbursement	1954-55			1955-56			1956-57		
	Number of Applications	Amount sanctioned	Amount disbursed	Number of Applications	Amount sanctioned	Amount disbursed	Number of Applications	Amount sanctioned	Amount disbursed
1	2	3	4	5	6	7	8	9	10
		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.
1. On the same day	—	—	—	—	—	—	—	—	—
2. Less than one month ...	13	26,490	26,490	41	42,500	42,500	65	11,500	11,500
3. 1-2- Months	28	34,880	34,880	33	26,750	26,750	11	10,082	10,082
4. 2-3 Months	21	30,500	30,500	14	14,020	14,020	29	28,650	28,650
5. 3-4 Months	27	40,100	40,100	[illegible]	12,000	12,000	13	22,000	22,000
6. 4-5 Months	27	34,350	34,350	8	23,750	23,750	9	17,750	17,750
7. 5-6 Months	11	13,480	13,480	11	17,800	17,800	4	10,000	10,000
8. 6-7 Months	6	11,200	11,200	4	6,000	6,000	5	13,500	13,500
9. 7-8 Months	8	15,526	15,526	10	27,200	27,200	4	10,500	10,500
Total	141	2,06,526	2,06,526	133	1,70,020	1,70,020	140	1,23,982	1,23,982

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TABLE No. 26

STATEMENT SHOWING DURATION OF LOANS

Duration of Loan	1954-55		1955-56		1956-57	
	Number of applications	Amount	Number of applications	Amount	Number of applications	Amount
1	2	3	4	5	6	7
		Rs		Rs		Rs
1 Less than 3 months	—	—	—	—	—	—
2 3-6 months	—	—	—	—	—	—
3 6-9 months	—	—	—	—	—	—
4 9-12 months	21	4,150	21	8,555	—	—
5 1-2 years	7	5,600	8	13,550	27	7,650
6 2-3 years	23	29,600	7	15,500	19	11,700
7 3-4 years	27	58,050	29	51 550	35	12,582
8 4-5 years	23	22,540	68	80.865	29	23,550
9 5 years and above	[illegible]	86.586	—	—	30	68,500
10 Those who have not stated the duration	—		—	—	—	—
Total	141	2,06,526	133	1,70.020	140	1,23,982

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TABLE No. 27

STATEMENT SHOWING THE REASONS FOR REJECTION OF THE APPLICATIONS FOR TAGAI LOANS

Reasons for rejection.	1954-55		1955-56		1956-57	
	Number of applications	Amount	Number of applications	Amount	Number of applications	Amount
1	2	3	4	5	6	7
		Rs.		Rs.		Rs.
1. Lack of security or adequate security	154	2,01,150	61	68,200	84	1,09,520
2. Purpose of loan not approved	310	2,60,565	263	2,37,250	148	2,11,500
3. Old dues to Government	81	2,27,500	27	48,755	27	78,750
4. Miscellaneous	105	53,385	30	48,875	21	41,398
Total	650	7,42,600	381	4,03,080	280	4,41,168

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Some significant features regarding the granting of *tagai* loans in the district are revealed by the foregoing tables. In the first place, the amount of *tagai* loans disbursed in 1954-55, 1955-56 and 1956-57 was much smaller than what was asked for by the cultivators. For example, in 1954-55, out of the total of Rs. 9,90,600 loans asked for, only Rs. 2,06,526 or 20.8 per cent were sanctioned and disbursed. Similarly, the percentage of loans actually granted in relation to the total loans asked for was 24.1 and 18.3 per cent respectively for the two succeeding years viz., 1955-56 and 1956-57. This reflects in some degree, the inadequacy of financial assistance obtained by the cultivators from the State, although it may be that the cultivators were not always moderate in putting down their requirements.* In the year 1957-58, *tagai* advances totalling Rs. 5,27,856 were given in the district of which Rs. 3,96,024 were given under the Land Improvement Act and Rs. 1,31,832 under the Agriculturist's Loans Act. The recoveries effected during this year amounted to Rs 2,46,295 which comes to about 32% of the total dues. From a consideration of tables No. 24 and No. 25 it appears that there was not much delay in the disposal of a majority of loan applications since, almost all the applications were disposed of within a span of 8 months. In view of the neccessity of careful scrutiny of applications for *tagai* loans and procedural requirements which they entail, it is stated that such a time-lag may not be considered to be unreasonable. However it is likly that in some of those cases where loans were sought to meet current farm needs the time-lag involved might have been long enough to have cause hardship to the borrowers concerned

*Looking to the number of applicants it would be observed that only a small number of the cultivators in the district apply for *tagavi* loans. They seem to prefer approaching moneylenders even though by doing so they have to pay higher rates of interest

It would be observed that only a small fraction of the total number of cultivators apply for *tagai* loans and the amounts of loan actually sanctioned are much less than the amounts asked for. The Tagai method of giving financial accommodation to agriculturists cannot in fact, be said to be playing much of an effective role in the rural economy of the district

*Another significant feature of the *tagai* loans granted was that the bulk of them represented long-term loans having duration of 4 years or more, while short-term loans running over a period of 9-12 months constituted a very negligible portion of the whole The percentage of long-term loans in relation to the total loans granted for the years 1954-55, 1955-56 and 1956-57 was respectively 52 8, 47.5 and 74.3.

The two major grounds of rejection of applications for loans were lack of security or adequate security which the borrower could offer and the non-approval by the sanctioning authority of the purpose for which the loan was sought Old dues to Government was another important reason for rejection. Whatever it may be the total number of applications rejected on all grounds formed a large portion of the total applications for loans.

Inadequacy of the total amount available for distribution as *tagai* and a proper reconciliation between the requirements of the agriculturist and his creditworthiness are problems which inevitably confront the administrator.

Since the enforcement of the Bombay Agricultural Debtors' Relief Act of 1939 as amended in 1945, *tagai* loans are granted to agricultual debtors for crop finance both in cash and in kind through grain banks, co-operative societies or the Revenue Department To the poorer cultivators, who have no land or who own insufficient land, the loans are granted for their maintenance as well as for the purchase of seed

The characteristic feature of the loans advanced under this Act is that in almost all cases the security taken is immovable property i. e. agricultural lands. In the case of *tagai* loans to weavers, residential houses are accepted as security where the borrowers are not in a position to offer security of land.

Financial Assistance to Industries.

This is given under the Bombay State-Aid to Small Scale and Cottage Industries Rules, 1935-as amended upto 20th January 1956. Loans are granted for the following purposes :

(1) construction of buildings, godowns, warehouses, wells, tanks and other works necessary for industrial operations and for purchase of land for the purposes ;

(2) purchase and erection of machinery, plant and appliances ;

(3) purchase of raw materials;

(4) working capital.

Since 1948, when a progressive industrial policy was outlined, Governmeut have been taking a very keen interest in the development of cottage and small-scale industries as one of the effective antidotes to the problem of unemployment. The decision of Government to develop these industries on a co-operative basis has been endorsed by the Planning Commission which has suggested that well-marked fields which are not encroached upon by large scale industries, should be reserved for cottage and small, scale industries. The Commission has emphasised that a major portion of rural economic activity should come under the co-operative sphere. The amendment to the State-aid to Industries Rules of 1935 was effected in 1955 and 1956 with a view to bringing the rules in line with the liberalised policy adopted by the Government of India to give fillip to the development of cottage and small-scale industries. The Central Government have placed Rs. 10 lakhs at the disposal of the State Government for grant of aid to cottage and small-scale industries on a slightly more liberal basis.

Under the amended "State-aid to Industries Rules" loans upto Rs. 75,000 in each case and in exceptional cases upto Rs. 1,00,000 are granted by the Department of Industries. The rate of interest on loans not exceeding Rs. 50,000 is brought down from 5 per cent to 3 per cent per annum. The rate charged on loans exceeding this amount is 5 per cent. Subject to the above limitation on the amount of loan, the loans are advanced to the extent of 75 per cent of the value of the security offered. In addition to the hitherto accepted securities of immovable property loans can also be given against the security of the

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value of raw materials, goods in process and stock in trade. Loans can also be given against personal security of persons other than borrowers.

In 1956-57, loans amounting to Rs. 80,000 were granted under the state Aid to Small Scale and Cottage Industries Rules, 1935 to two industrial concerns in Surat district. One of these concerns engaged in the genoration and supply of electrical power was granted a loan of Rs. 50,000 for purchase of appliances. The other concern which was engaged in the manufaeturo of stainless steel artieles received a loan of Rs. 30,000. of this Rs. 10,000 were given for purchase of machinery and Rs. 20,000 for working capital. The rate of interest charged for the loans in both cases was 3 per cent per aunum. These loans are to be repaid in ten years by annual instalments. No loans, however, were disbursed to any party in the district during the preceding two pears viz., 1954-55 and 1955-56.

Financial assistance to cottage and village industries granted under the following four schemes adminstered by the Co-operative Department :—

(1) Scheme for grant of loans and subsidies to bonafide craftsmen and their co-operative societies for purchase of tools and equipment and for working capital.

This scheme has been in operation since 1941 in one form or another. Under the latest version of this scheme, financial assistance upto Rs. 2,000 (Rs. 1,000 for tools and Rs. 1,000 for working capital) can be granted to each artisan. In the case of a trained artisan, 25 per cent of the amount sanctioned for tools and equipment can be treated as subsidy. The remaining amount for tools and equipment and that for working capital is to be treated as loan bearing interest at 4½ per cent and repayable in five years in equal monthly instalments The securities to be furnished may be either one or two personal sureties or the mortgage of immovable property.

Co-operative Societies having at leart one-third of their members as bonafide craftsmen or persons following cottage industries can be granted financial assistance upto Rs. 5,000 for the purchase of tools and equipment. Of this amount, upto 50 per cent can be treated as subsidy. The remaining portion of the assistant is to carry interest at the rate of 4½ per cent. As regards loans for working capital, the Joint Registrar has been empowered to give a marginal Covernment guarantee of 30 per cent for a credit upto Rs, 15,000 to be raised by each society from the central financing agencies.

(2) Scheme for grant of loans aud subsidies to backward class artisans for purchase of tools, appliances, etc.

This scheme was originally sanctioned in September, 1943 as a result of the recommendations of an *ad hoc* committee appointed to consider ways and means for the improvement of backward classes. The distinctive features of this scheme and the assistance granted thereunder are indicated below:—

(*i*) Financial assistance upto Rs. 2,000 in each case can be granted to backward class artisans for the purchase of tools and equipment and for working capital on terms and conditions similar to those obtaining in respect of loans and subsidies to *bonafide* craftsmen. The only modifications are firstly that if the backward class artisan has received training at one of the peripatetic schools of this Department or in a technical institution recognised by Government, the entire amount of financial assistance is free of interest and secondly, in the case of artisans who have not received such training, 50 per cent of the amount is free of interest and the remaining 50 per cent will carry interest at the rate of 4½ per cent.

(*ii*) Industrial co-operative societies of backward class artisans are also eligible for the grant of loans and subsidies as in the case of other industrial co-operative societies. Exemption from interest in the case of a Co-operative Society is only given when at least 50 per cent of its members have received training in the peripatetic schools maintained by this Department or in technical institutions recognised by Government. If 75 per cent of the members of the Co-operative Society are untrained backward class artisans, 50 per cent of the grant sanctioned for working capital would bear interest at the rate of 4 per cent per annum and the remaining portion of the loan can be granted free of interest.

(2) Scheme for grant of assistance to educated unemployed to start or develop cottage industries :—

The scheme was first started in 1942. Under this scheme financial assistance in the form of subsidy and loan can be granted to educated persons who have studied upto S.S.C. Examinatin or passed the Regional Language Final Examination and who are unemployed as well as to educated persons who are already engaged in some business, industry or trade. Assistance is offered to enable such persons to set up some cottage industries, business or trade or to expand their activities. Financial assistance upto Rs. 3,000 can be sactioned in each case.

A sum upto 25 per cent of the total financial assistance can be treated as subsidy in deserving cases only and the remaining amount is treated as a loan carrying interest at 4½ per cent. The loan is repayable in 5 years in equal monthly instalments. Security in the form of one or two personal sureties or the mortgage of immovable property is insisted upon.

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FINANCIAL ASSISTANCE TO AGRICULTURE AND INDUSTRY

(4) Scheme for Grant of *Haskell* or Nutan Ghanis on loan-*cum*-subsidy basis.

The scheme is meant to induce *telis* to use improved types of *ghanis* in preference to the old, less productive *ghanis*.

The *nutan ghanis* are supplied to *telis* and their co-operative societies on loan-*cum*-subsidy basis and the element of subsidy is not more than ¼ of the total cost or Rs. 75, whichever is less.

No loan and subsidy was sanctioned to any individual artisan or *Teli* Co-operative societies in Surat district under the scheme for grant of Haskell or *nutan ghanis* on loan-*cum*-subsidy basis. However, the financial assistance rendered by the State under the first three schemes described above is shown in table No. 28. Financial assistance is given also to handloom industry under various schemes sponsored by the State. Handloom industry has been receiving special attention from Government owing to its importance as a cottage industry which is regarded as next only to agriculture from the point of view of the employment it provides.

The Government of India realising the acute position of the handloom industry and the necessity to rehabilitate it and put it on a sound footing constituted an All India Handloom Board and allotted certain quotas to each State Government out of the proceeds of the additional excise duty which was levied on mill cloth at the rate of 3 pies per yard. A number of schemes were submitted to the All India Handloom Board for being financed from the quota of the cess fund allotted to Bombay State. On the recommendation of the Board some of the schemes were approved by the Government of India and financial assistance was made available to the industry under these schemes.

Thus, in Surat district, a sum of Rs. 48,000 was sanctioned as loan for working capital to 4 weavers' societies in the year 1956-57. During the same year Rs. 1,910 were sanctioned as loan for share capital to 3 societies and Rs. 16,700 as loan for marketing to the Surat District Industrial Co-operatives Association Limited. A grant of Rs. 22,000 and a loan of Rs. 10,000 was sanctioned to the same association for starting a pattern-making factory in Surat. Financial assistance amounting to Rs. 6,917 was also given to some weavers' societies under other development schemes.

Apart from the financial assistance provided directly by Government through its various departments, it also gives medium and long-term financial assistance, though indirectly, to small scale amd medium-sized industries through the Gujarat State Financial Corporation which is a statutory body having its capital mainly contributed by the State Government.

FINANCIAL ASSISTANCE TO AGRICULTURE AND INDUSTRY

TABLE No. 28

STATEMENT SHOWING LOANS AND SUBSIDIES GRANTED BY THE STATE IN SURAT DISTRICT UNDER THE STATE AID TO SMALL-SCALE AND COTTAGE INDUSTRIES RULES, 1935.

Year ending 30th June.	Bonafide Craftsmen including industrial societies.		Backward Class		Educated unemployed.	
	Loan	Subsidy	Loan	Subsidy	Loan	Subsidy
1	2	3	4	5	6	7
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1946-47	1,935- 0-0	267-8-0	13,750-0-0	4,301-8-0	...	...
1947-48	2,250- 0-0	750-0-0	3,980-0-0	120-0-0	...	...
1949-50	43,000- 0-0	...	...	...	...	...
1950-51	450- 0-0	50-0-0	...	...	...	...
1953-54	32,231-14-0	1,806-8-0	1,987-0-0	...	...	...
1954-55	45,000- 0-0 4,000- 0-0	...	5,841-0-0	781-0-0	4,000	...
1955-56	...	...	3,666-0-0	...	...	...
1956-57	15,000- 0-0	...	4,055-0-0	515-0-0	...	...

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Private Limited Companies.

Private and Public Limited Companies.—There were 46 Private Limited Companies in the district in the year 1956. A classification of these companies according to the nature of business transacted by them shows that as many as 25 companies were in the manufacturing group, 18 were trading concerns and 3 were in the transport group. The distribution of the companies in the manufacturing group was as follows.—

I *Manufacturing*	*No. of companies*	*Paid up capital*
		Rs.
1. Textiles	6	24,99,500
2. Mining	2	78,000
3. Wood cutting and Forestry	1	1,00,000
4. Ice-manufacturing	2	4,78,000
5. Agriculture and stock raising	2	60,800
6. Iron and Steel	4	4,75,000
7. Chemicals	3	4,98,100
8. Oil mills	1	2,00,000
9. Printing and Paper	2	2,21,000
10. Bobbins	1	35,000
11. Motion picture	1	2,00,000
II Transport	3	8,49,750
III Trading concerns	18	20,34,350
Total ...	46	77,29,500

The paid-up capital of these companies amounted to Rs. 77,29,500. There were only two companies which had paid-up capital of over Rs. ten lakhs. Those that had paid-up capital of Rs. 5 lakhs numbered two and those that had paid-up capital between Rs. one lakh and five lakhs numbered 19.

The largest amount of paid-up capital was in respect of manufacturing companies which alone amounted to Rs. 48,45,400. Next in order were trading companies with Rs. 20,34,350 and lastly the transport companies with Rs. 8,49,750.

Public Limited Companies.

Public Limited Companies incorporated in the district, other than Joint Stock Banks, Investment Trusts etc., numbered 21 in the year 1956. Of these one was registered in 1899, one each in 1921, 1924, 1930, 1933, 1937, 1939, 1942, 1943, 1948, 1950, two each in 1936, 1940 and 1945 and four in 1947. The oldest of the comapanies viz., the Ishwar Cotton and Ginning and Pressing Company was registered in the year 1899.

The primary object with which these companies start functioning is to engage themselves into some form of productive activity and thereby earn profit. These companies require capital for any or all of the purposes mentioned below :—

(1) acquisition and maintenance of plant, equipment, buildings and other fixed assets ;

(2) holding of current assets in the form of (*a*) inventories of finished and partly finished products pending sales, as well as raw materials and stores required for production ; (*b*) liquid assets such as cash balances and Government and industrial securities required to pay current or future liabilities and to tide over lean times ; and (*c*) accounts receivable, comprising advance tax payment and credit extended to customers and others.

The funds required may be obtained from internal or external sources. Internal sources are balance of profits left after paying all expenses, taxation, dividends and accumulated reserves. External sources may be classified into stock capital, loans and debentures and accounts payables etc. These companies channelise the funds collected from these sources into some kind of productive activity such as manufacturing, trading or transport.

Classification.

A classification of these companies according to the nature of the business transacted by them shows that 13 of the 22 companies were in the manufacturing group. Of the remaining, four were trading, four in the group of finance and Investment and one was an agricultural trading and stock raising company.

The total amount of paid-up capital of these companies amounted to Rs. 66,72,345. The largest amount of the paid-up capital was in respect of manufacturing companies which amounted to Rs. 53,88,095. Next in order were the trading companies with Rs. 8,38,500 and lastly the miscellaneous group with Rs. 55,600.

The paid-up capital of these companies under the various groups was as under :—

	Rs.
(*i*) Manufacturing	53,88,095
(*ii*) Finance	3,90,150
(*iii*) Trading	8,38,500
(*iv*) Miscellaneous	55,600
Total	66,72,345

The following table indicates the financial position during the year 1956 of 18 companies only, of which alone the balance sheets were available. (Table No. 29).

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TABLE No. 29

FINANCIAL POSITION OF THE PUBLIC LIMITED COMPANIES AS IN THE YEAR 1956

SURAT DISTRICT

(FIGURES IN HUNDREDS)

	Liabilities.						Assets					
	Paid-up Capital	Reserves	Other Reserves	Loans	Current liability	Profit and Loss Account	Fixed Assets	Other Assets	Inventories	Liquid Assets	Receivables	Profit and Loss Account
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I Finance and Investment	3,651	1,040	—	10,940	2,362	22	—	2,617	—	7,841	7,452	65
II (1) Textiles	28,898	2,351	—	46,440	14,594	2,404	15,485	7,525	37,640	20,559	10,530	2,948
(2) Paper and Straw	9,996	—	—	26,441	6,352	288	12,483	11,313	14,569	2,371	2,341	—
(3) Electrical	6,545	451	7,258	4,298	3,060	388	6,278	8,511	2,931	927	1,121	2,232
(4) Printing	886	—	260	—	71	—	386	309	42	26	130	324
(5) Engineering	1,950	—	—	1,507	182	—	1,622	612	1,194	10	75	126
III Trading	10	5	—	—	1,361	—	—	2	—	36	1,338	—
IV Miscellaneous*	5,559	476	—	626	850	33	718	1,365	1,915	643	2,903	—

*In the miscellaneous group are included dairy and stock raising companies.

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EXTENT OF EMPLOYMENT.

THE CENSUS STATISTICS OF 1951 reveal that Trade and Commerce provided primary source of livelihood to 1,22,456 persons or 6.6% of the total population and secondary means of livelihood to 10,575 persons. Of the total of 1,22,456 persons deriving their primary means of livelihood from trade, 29,066 persons were self-supporting, 86,460 persons non-earning dependents and 6,930 persons earning dependents. Of the persons deriving their secondary means of livelihood from trade and commerce 3,626 were self-supporting and 6,949 earning dependents.

The following table gives the number of self-supporting persons engaged in various trades in Surat district (1951).

TABLE No. 1

NUMBER OF SELF-SUPPORTING PERSONS ENGAGED IN VARIOUS TRADES IN SURAT DISTRICT ACCORDING TO 1951 CENSUS.

Sub-Division.	Employers	Employees	Independent workers	Total.
1. Retail trade otherwise unclassified.	1,390	1,350	3,384	6,124
2 Retail trade in foodstuffs (including beverages and narcotics).	2,429	2,643	8,037	13,109
3 Retail trade in fuel (including Petrol).	548	581	574	1,703
4. Retail trade in textile and leather goods.	1,653	1,481	2,304	5,438
5. Wholesale trade in foodstuffs.	56	33	216	305
6. Wholesale trade in commodities other than foodstuffs.	188	163	270	621
7. Real Estate	1	—	—	1
8. Insurance	2	56	19	77
9. Money lending, banking and other financial business.	150	1,144	394	1,688
	6,417	7,451	15,198	29,066

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EXTENT OF EMPLOYMENT

The table discloses three distinct characteristics of the district : (1) concentration of traders, in retail trade, (2) overwhelming number of retail traders in food-stuffs and textile and leather goods and (3) predominance of independent workers.

Of the total number of self-supporting traders, 90.4%were engaged in retail trade, 3.1%in wholesale trade, 5.8%in financial business and a very negligible number in insurance and real estate business. 52.2%of the total self-supporting traders were independent workers, 22.07%were employers and 25.6% were employees.

The following table gives rural and urban composition of the population whose primary source of livelihood is trade and commerce.

TABLE No. 1

Sub-Division	Rural	Urban.	Total.
Self-supporting	8,507	20559	29,066
Non-Earning dependents	23,255	63,205	86,460
Earning dependents	2,089	4,841	6,930
Total...	33,851	88,605	12,2,456

Of 29,066 self-supporting persons, 20,559 are from urban areas and the remaining 8,507 are from rural areas. The table reveals that, the major portion of the total pupulation of the district is living in rural areas; urban areas accounted for 70.6% of the mercantile community (self-supporting and earning dependents together) as against 29.4% accounted for by rural areas. Of the dependents of trading community, 73.1% resided in urban areas and 26.9% in rural areas.

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EXTENT OF EMPLOYMENT.

TABLE No. 3

Sub-Division.	Agricultural Class.	Non-agricultural Class.	Total.
Self-supporting	2,634	992	3,626
Earning dependents	1,286	5,663	6,949
Total ...	3,920	6,655	10,575

The number of persons engaged in trade and commerce has shown great increase between 1872 and 1951. Surat has been famous for its trading and commercial activities since olden days. But due to the absence of a common method of presenting occupational data in decennial census returns and changes in the boundaries of the district due to the merger of the former Indian states in the year 1949, a comprehensive picture of changes in occupational pattern from decade to decade could not be attempted. The census of 1872 gives a total population of 6,07,087 souls out of which 7,796 persons or 1.28% were engaged in trade and commerce. The census of 1951 shows 1,22,456 persons or 6.6% of the total population engaged in trade and commerce.

CHANGE IN PATTERN AND ORGANISATION.

The increase in the percentage of persons depending on trade and commerce is quite noteworthy. It is due partly to the merger of Baroda State territories, increase in cultivation of cash crops like cotton, plantains, mangoes and oilseeds, development of textile and handloom industries which produce jari, art silk and cotton textiles, development of oil crushing industry and overall improvement of transport facilities, specially railways, towards which the more insecure and expensive coastal trade was diverted with much economic gain to the trading community. The six ports of Surat district viz., Surat, Bilimora, Bulsar, Umarsadi, Navsari, Kolak and Bhagwa, which are mentioned in the old Gazetteer, play nowadays an insignificant and negligible role in the distribution of agricultural and industrial products of Surat district.

COASTAL TRADE.

In medieval times, Surat was one of the principal ports of Gujarat, which attracted even foreigners for trading. This importance has declined in modern times. Still, trade is being carried through the four ports viz. Surat, Navsari, Bhagwa and Matwad in the district. The western portion of the district is nearer the Arabian Sea and Surat itself is situated on the river

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COASTAL TRADE

Tapi; hence it is quite natural that trade through country boats has a place in the overall economic activities of the district. Nearly 1,156 Sq. miles of the area are covered by forests from where bamboos for export and local use are obtained.

In the two tables that follow, figures of coastal trade (exports and imports) for Surat and other three ports for 1952-53 to 1955-56 are given. Chief among the commodities that are found in coastal trade are *Mangalore tiles*, bamboos, *Chuna* tiles, live stock, cement, onions, rubble stones, ghee and oil.

TABLE No. 4

COASTAL TRADE

(Quantity in Bengali Mds. unless otherwise specified and value in Rupees).

Year.	Name of Port.	Quantity.		Value.	
		Imports.	Exports.	Imports.	Exports.
1952-53	Surat	6,02,112	1,66,684	25,51,032	15,40,576
1953-54	..	7,04,620	2,10,980 3,00,000*	31,54,537	23,56,100
1954-55	,,	3,05,032	91,728	16,70,886	13,32,664
1955-56	,,	1,09,812@ 18,38,444 + 3,52,296	1,76,820 2,38,875*	28,91,310	23,49,286

* Number of bamboos.
@Number of cocoanuts.
+ Number of tiles.

1. The statistical and other information given in the following pages pertains mostly to the period 1952-53 to 1955-56. Information for later years is given in the Supplement at the end of the volume.

TABLE No. 5

COASTAL TRADE

(Quantity in Bengali Mds.)

Year	Name of Port.	Quantity		Value in Rs.	
		Imports	Exports	Imports	Exports
1952-53	Bhagwa	46,845	—	6,17,681	—
1953-54	,,	31,511	—	3,58,872	—
1954-55	,,	33,122	—	4,19,091	—
1955-56	,,	34,471	—	4,28,410	—
1952-53	Matwad	37,576	—	1,18,853	—
1953-54	,,	38,328	—	1,01,192	—
1954-55	,,	58,712	—	1,46,887	—
1955-56	,,	48,272	—	1,71,050	—
152-539	Navsari	25,724	—	99,556	—
1953-54	,,	31,136	—	87,506	—
1954-55	,,	73,444	—	1,44,910	—
155-569	,,	1,12,056	—	1,85,397	—

TRADE ROUTES.

The only national highway that runs through this district is the Bombay-Ahmedabad Road which is approximately 105 miles in length in this district beginning at river Damanganga and ending at river Kim near Vadoli village. Following are the provincial highways running through Surat district.

1. Surat-Dhulia-Malkapur-Nagpur–Raipur--Deoghar Cuttack Road (net length in the district-40.7 miles).
2. Bulsar-Dharampur-Rajbari-Peint-Nasik Road-(net length in the district-13.9 miles.)
3. Bilimora–Chikhali–Bansada–Malegaon–Vane–Nasik Road (net length in the district-15.7 miles.)
4. Vadoli-Kim-Mandvi-Madhi-Buhari-Bansda Road (net length in the district-77.0 miles.)

Following are the other major district roads:—

1. Bilimora-Waghai-Ahwa Road.
2. Buhari-Waghai; Waghai-Dharampur.
3. Surat-Bardoli-Bajipura-Vyara to Songadh Road. This route runs parallel to Tapi Valley Railway.
4. Navsari to Ankleshwar-Two routes—
   (a) Navsari-Sachin-Surat-Kim-Ankleshvar.
   (b) Navsari-Chalthan-Ubeli-Kathor-Kim-Ankleshwar.

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TRADE ROUTES

Surat is the headquarters station for Surat district. The broad guage tract of Western Railway which is the most important connecting link with other districts runs parallel to the coastal sea route north to south. The products of the district hinterland are brought to the main line of Western Railway or to the coastal ports by three narrow guage routes running east to west.

On the northern skirts of the district is the narrow guage Kosamba-Umarpada section which starts from Kosamba lying on the main broad guage route. This section deals with forest traffic between Vankal and Umarpada and cotton traffic between Kosamba and Mangrol.

The second narrow guage route of Bilimora-Vaghai section connects the district with the rich Dangs forest. The main traffic of this section is of timber, firewood, bamboos, bullies, tiles and grass in addition to mangoes, plantains, chikoos, rice and vegetables.

The Tapi Valley section of Western Railway is an important railway line of the country in as much as it connects two important regions-Gujarat and Central India. It passes through the fertile cotton growing areas of Surat district. Udhna, Bardoli, Madhi, Vyara and Songadh are important stations.

EXPORTS AND IMPORTS.

The table below reveals that in spite of the predominence of agriculture, Surat is a deficit district as far as food crops are concerned. However, the soil is much more suitable for the production of certain kinds of fruits viz., mangoes, plantains, chikoos etc., and Surat district is famous for the export of all these commodities. Cotton is the most important cash crop and hence the importance of the textile industry. Surat has also developed the decaying gold and silver thread industry especially during the war period. The art silk industry is also a recent growth. Hence cotton, *jari* and art silk cloth form important articles of export. Bilimora is famous for the manufacture of bricks and manglori roofing tiles but nowadays Bilimora has lost the important Bombay market for bricks due to prohibitive transport cost and hence recently brick production has gone down. Other important articles of export are cotton, cotton seeds, paper boards manufactured by the paper mills at Bilimora, castor seeds and oil.

TRADE CENTRES.

The distribution of imports and collection of exports are done at trade centres, market places, village shops, fairs and also by pedlers and hawkers. The most important among the agencies of assembling and distribution of agricultural and other goods are the trade centres where in addition to wholesale trade, retail trade is also carried on to some extent. The following is the taluka wise description of important trade centres of Surat district.

TABLE No. 6

SOURCES OF IMPORTS AND DESTINATIONS OF EXPORTS.

Name of the Commodity. 1	Imported from 2	Exported to. 3
CEREALS & PULSES.		
1. Rice ...	Improved varieties Bezwada-Punjab and Muzfarnagar and Sahranpur districts of U.P.	Coarse varieties Bombay and Ahmedabad.
2. Bajri ...	North Gujarat, Rajasthan, Madhya Pradesh and Punjab.	—
3. Wheat ...	Ahmedabad, Bhal pradesh, Rajasthan, Punjab.	—
4. Jowar ...	Rajasthan, Madhya Pradesh-Sholapur, Barsi (Ahmednagar).	—
5. Kodra ...	Nasik-Kaira.	—
6. Bavto (Nagli and Ragi).	Panch Mahal, Nasik and Dharampur.	—
7. Lang ...	Punjab and Broach.	—
8. Peas ...	Broach, Dahod and Madhya Pradesh.	—
9. Tuver ...	East Khandesh, Kaira, North Gujarat-Madhya Pradesh.	Bombay and Poona.
10. Math ...	North Gujarat, Malwa.	Bombay.
11. Adad ...	E. Khandesh-Madhya Pradesh.	Bombay (*Dal* only).
12. Mug ...	Khandesh, Hyderabad.	—
13. Barley ...	Punjab.	—
14. Maize ...	Godhra	—
15. Gram ...	Broach, Punjab-local.	—
NON-FOOD CROPS :		
1. Hay and Fodder ...	Local.	Bombay.
2. Groundnut ...	Khandesh, Saurashtra, Local.	—
3. Sesamum (Til) ...	Khandesh-Kaira, Saurashtra, Madhya Pradesh.	—
4. Other oil seeds (Linseed, Rapeseed-Mustard etc.).	Mehsana, Zavra and North Gujarat.	—

CHAPTER 8.

Trade.

EXPORTS AND IMPORTS

Name of the Commodity. 1	Imported from 2	Exported to. 3
NON-FOOD CROPS—(Contd.)		
5. Cotton .. 6. Cotton seeds	Details discussed in Separate note on 'Cotton' trade.	
7. Cocoanut ...	Bombay-Bezwada, Ratnagiri-Calicut.	—
8. Tobacco ..	Kaira and Nasik	—
9. Other drugs and narcotics.	Bombay.	—
GROCERY :		
1. Sugar	U.P. Bihar, Maharashtra.	—
2. Gul ...	U.P., Maharashtra-Local.	—
3. Tea ...	Nilgiri, Calcutta.	
4. Coffee	Calcutta, Cochin, N. Kanara.	—
5. Salt ...	Saurashtra.	—
6. Spices ...	Bombay.	—
7. Condiments ...	Bombay, Dharwar.	—
8. Matches ...	Madras, Mysore, Bombay.	—
9. Edible oils ...	Saurashtra, Khandesh, Madras.	—
10. Hydrogenated oil ...	Bombay, Amalner, Saurashtra, Madhya Pradesh.	—
11. Ghee ...	Saurashtra, Kaira.	—
12. Kerosene ...	Bombay.	—
13. Dry fruits ..	Bombay, Delhi, Amritsar.	—
TEXTILES :		
1. Cotton cloth ...	Bombay, Ahmedabad, Nadiad, Madras, Sholapur.	Punjab, U.P., Delhi.
2. Silk cloth ...	Bombay, Madras, Local.	Punjab, Jammu, Ahmedabad, Calcutta, Amritsar.
3. Woollen cloth ...	Amritsar, Dhariwal, Punjab, Kanpur.	—
4. Cloth (Rayon, Linen, Nylon) etc.	Bombay, Local.	Delhi, Punjab, Amritsar, Bombay, Ahmedabad.
5. Dhoties and cotton sarees.	Bombay, Ahmedabad, Sholapur.	—
6. Readymade clothes ...	Madras, Bombay, Local.	—
7. Carpets and Rajais ...	Bombay, Broach, Agra.	—

Name of the Commodity 1.	Imported from 2.	Exported to 3.
FRUITS, VEGETABLES FOREST PRODUCE ETC. :		
1. Dates ...	Bombay.	—
2. Plantains, 3. Mangoes	Details discussed in a separate note on Plantains and Mangoes trade.	
4. Chikoo ...	--	Bombay, Ahmedabad
5. Potato ...	Poona, Nasik, Local, U.P. N. Gujarat, Madras.	—
6 Other fruits ...	Kashmir, Delhi, Nagpur.	—
7. Onions ...	Saurashtra, Nasik, Farukabad, Talaja, Patiala.	—
8. Other vegetables .	Local	Bombay, Ahmedabad.
9. Chillies ...	Saurashtra, Madhya Pradesh, Punjab.	---
10 Timber ...	Details discussed in a separate note.	
11. Teak wood ..	Rangoon.	---
12 Plywood	Bombay.	--
13. Charcoal ..	Dangs, Local.	—
MISCELLANEOUS:		
1 Hardware ..	Bombay, Jamshedpur.	—
2. Cement ...	Jamnagar, Sevalia, Bombay, Lakheri (Rajasthan)	---
3 Building materials ...	Bombay, Quetta, Hyderabad.	—
4 Metals ...	Bombay, Calcutta, Delhi.	—
5. Toilet goods ...	Bombay.	—
6 Perfumes ..	Bombay, Rajkot, Rajasthan.	—
7. Haberdashery ..	Bombay	—
8 Honey	Dangs, Rajpipla, Rajasthan, Honavar.	—
9 Betel leaves .	Salem, Bassain, Bombay.	Rajpipla, Broach.
10 Ironwares and Tinwares.	Bombay, Jamshedpur.	—
11 Brass and copperware.	Bombay.	--
12 Glassware ..	U.P., Bombay, Saurashtra, M.P.	—
13 Cutlery ...	Bombay, Madras, Calcutta, Delhi.	—
14. Hides ...	Bombay, Kaira, Local.	Bombay.
15 Stationary ...	Bombay	--
16 Porcellain ...	Bombay.	—
17 Leather goods ...	Bombay.	—
18. Medicines ...	Bombay, Baroda.	—
19 Gold and Silver thread.	Local.	Bombay, Amritsar, Delhi, Calcutta.

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Trade
TRADE CENTRES
Pardi Taluka

Pardi is the taluka headquarters of Pardi taluka. It is situated on Western Railway and is also connected with Udwada and Bulsar by a *tar road*. Vapi and Udwada are other two trade centres. Traffic in hay mostly booked to Bombay is very heavy at Vapi. Udwada is a centre of great religious and historical significance for Parsees. Road metal quarries near Udwada are a source of supply of metal, *kapchi* etc., to southern Gujarat.

The volume and value of the chief commercial-agricultural commodities collected at this trade centre are as follows :—

Articles	*Quantity in B. mds.*	*Value in Rupees*
Food Grains	1,25,000	12,50,000
Pulses	20,000	2,00,000
Mangoes (Pardi & Udwada) ...	5,00,000 (Baskets)	25,00,000

Business is both retail and wholesale. There are nearly 60 merchants at Pardi. Village sales are very common. The merchants move with their carts in villages and purchase the produce in small quantities. No weighing charges or commission charges are deducted from payments to be made to the seller. But the produce is always weighed by the purchaser or the person employed by him. *Kadada system* both in rate and quantity is very common. The kadada charge is estimated at 4%. Due to controls food grains were not sold in open market during the war and post-war periods.

Bulsar Taluka.

In addition to being a taluka headquarters, Bulsar is the district headquarters of the various departments of the Western Railway. Bulsar division is well connected by road with the adjoining important business centres like Dharampur, Pardi, Udwada, Chikhali, etc. Also it has a small harbour known as Bhagda Bunder from where timber and jaggery are exported to places in Saurashtra. Tithal sea coast some three miles away is a place of summer resort.

Bulsar is one of the important trade centres for grass and timber. Sugarcane, rice, pulses and mangoes are the main agricultural products of the place. Hence Bulsar has proved to be one of the important wholesale markets for this taluka and for the adjoining talukas. Almost 50% of the produce is received for sale from the adjoining talukas.

The turnover of the chief agricultural commodities collected at this trade centre is as under :

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Commodities	*Quantity in Bengali mds.*	*Value in Rupees.*
Paddy	2,25,000	24,75,000
Val	45,000	4,50,000
Gur	30,000	4,50,000
Mangoes	6,00,000	30,00,000

The produce is distributed as under :

Commodities	*Surat*	*Bombay*	*Saurashtra*	*Ahmedabad*	*Broach*
Paddy ...	25%	25%	25%	25%	—
Val ...	75%	25%	--	—	—
Gur ...	30%	—	30%	—	40%
Mangoes ...	—	85%	10%	—	5%

Most of the business here is wholesale but village sales are also common. The produce is weighed by the persons employed by the purchaser. Agriculturists also bring their produce to the market where it is sold by the *Hatha* system.

The customary market charges are as under :

Weighment	...	Paddy	Rs. 0-5-0 per cart.
"	...	Gur	Rs. 0-0-6 per B. md.
Dalali (brokerage)	...	Paddy	Rs. 0-3-0 per cart.
*Vatav (for all)	...		1%

There are about 20 wholesalers and 125 retailers. The merchants hire their godowns according to requirements. Bulsar has got adequate transport facilities but during the mango season it becomes very difficult to clear the mango traffic speedily.

Recently established Atul Products, one of the largest factories in Asia manufacturing chemicals, sulphadrugs and dyes, is situated at Parnera at a distance of about five miles from Bulsar. Lederle is another American chemicals and drugs preparing firm associated and working in collaboration with Atul Products in the same vicinity.

Chikhali Taluka.

Chikhali is a taluka headquarters situated at a distance of about 7 miles from Bilimora. The produce of this taluka is exported from Bilimora station which is connected to it by tar road.

*A purchaser deducts a commission per hundred rupees worth of goods purchased for paying money in cash. A purchaser cannot deduct vatav if payment is deferred.

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The turnover of the chief agricultural commodities collected at this trade centre is as under :

Name of Commodities.	Arrivals in Bengali mds.	Value in rupees.
Paddy	1,20,000	13,20,000
Jowar	22,500	2,25,000
Val	15,000	1,50,000
Gur	20,000	3,00,000
Cotton	18,000	6,70,000

The surplus produce is exported as under :

Commodities	*Surat*	*Ahmedabad*	*Saurashtra*	*Bombay*
Paddy... ...	25%	25%	25%	25%
Jowar ...	100%	—	—	—
Val	75%	—	—	25%
Gur	30%	40%	30%	—
Cotton ...	40%	30%	—	30%

The system of marketing is the same as that obtaining in Bulsar taluka. The customary market charges are as under :

Brokerage ...	Grains	2%
Weighing charges ...	,,	nil.
Commission charges	Gur	6¼%
Weighing charges ...	Gur	Rs. 3-2-0 per 100 pots each weighing about ¾ B. md.
Brokerage ...	Cotton	1¼% per cart of 15 B. mds.
Mehta Sukhadi ...	,,	0-8-0 per cart.

There are about 30 wholesale merchants, 100 retail traders and 10 general commission agents.

Dharampur Taluka.

Dharampur is a taluka headquarters. It is connected by kachha road on one side with Bulsar and on the other side with Nasik. Half the land of this taluka is coverd by forest area and timber is exported through Bulsar station.

The turnover of the chief agricultural commodities collected at this trade centre is as under :

Paddy	2,60,000 B.mds.	Rs. 26,00,000
Niger seed ...	8,250 ,,	Rs. 1,32,000
Gur	30,000 ,,	Rs. 4,50,000

The surplus produce is distributed as under :

	Surat	Broach	Bombay
Paddy	80%	10%	10%
Niger seed	100%	—	—
Gur	50%	50%	—

Village sales are very common. Most of the produce is sold either through village sales or through weekly bazars. The petty merchants effect their purchases from the weekly bazars and sell the same to the wholesale purchasers. The produce is weighed by the purchasers. Kadada system is very common.

There are (1959,) about 20 wholesalers and 100 retailers in Dharampur. The customary market charges are as under :

Weighing charges ...	Food grains	0-5-0 per cart load.
,, ...	Gur	0-0-6 per B. md.

Bansda Taluka.

There are two trade centres viz., Bansda and Unai in Bansda taluka. The former one is the taluka headquarters. Half the land of Bansda taluka is covered by forest area. The main produce of the forest is bamboo, firewood and timber which is exported via Bilimora station. Bansda is connected by metal road with Bilimora (20 miles) and Unai (7 miles).

Unai is a railway station on Bilimora-Waghai line. There are hot-water springs about 300 yards away from the station and hence it has become a place of pilgrimage. A fair is held once in a year on full moon day of *chaitra* when about 5,000 people visit the place by trains and an equal number of people from nearby places.

The turnover of the chief agricultural commodities collected at this trade centre is as under :

Commodity.	Unai		Bansda.	
	Arrival	Value.	Arrival.	Value.
Paddy ...	50,000	5,50,000	10,000	11,00,000
Bunto ...	10,000	50,000	13,000	65,000
Cotton ...	—	—	7,200	27,000

The produce is distributed as under :—

	Surat	Bombay	Ahmedabad
Paddy...	60%	20%	20%
Bunto	100%	—	—
Cotton	100%	—	—

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The village sales are very common but most of the produce is sold through weekly bazars. The petty merchants effect their purchases from these bazars and sell it to the wholesale purchasers. The produce is weighed by the purchaser. *Kadada* system in kind and in price rate is very common. Bhil cultivators take advances against seasonal crops and thus the produce in a way is sold before it is harvested. The usual rate of interest is 12%.

There are about 20 wholesalers, 50 retailers and 10 brokers in Bansda. The customary charges are as under :

Baitala*	..	2 seers per B. md.
Weighing charges	..	Rs. 0-4-0 per cart of about 12 B. mds.
Brokerage	..	Rs. 0-4-0 per cart.

Gandevi Taluka.

Gandevi is a taluka headquarters and is connected by metal road with Amalsar and Bilimora. The surplus produce is exported from these two stations. There was formerly a sugar factory which has ceased functioning. However a new co-operative sugar factory is proposed to be started under government plan to encourage agriculturists' co-operatives. Gandevi was very famous for jaggery but its production appears to have gone down recently.

There are two important trade centres in Gandevi taluka viz., Bilimora and Amalsar. Both are on the main Bombay-Ahmedabad section of Western Railway. Amalsar is a well known trade centre for fruits viz. mangoes, plantrns and chikoo while Bilimora in addition is well known for its timber trade.

Bilimora is a junction for the Bilimora-Waghai section of the Western Railways. It has one textile mill, one paper mill, one power loom factory, two tile factories, three castor oil mills and one factory manufacturing surgical and hospital equipments. It is also surrounded by villages rich in agricultural produce viz. jowar, rice, sugarcane, pulses etc.

Bilimora port is not actually a sea port but a tidal river port. The Arabian sea is at a distance of about seven miles from this tidal river Ambika. Mostly timber, bamboo and tiles are exported from here to Saurashtra. Inward traffic from Saurashtra to Bilimora is practically nil so far as railway is concerned but limestone useful for tiles factories is imported from Saurashtra by sea.

*The system by which a purchaser takes 42 pounds instead of 40 lbs though price ispaid one for standard maund of 40 lbs.

The turnover of the chief agricultural commodities collected at this centre is as under :

Commodities.	Amalsar.		Bilimora.	
	B. mds.	Value. Rs.	B. mds.	Value. Rs.
Mangoes ..	90,000	7,50,000	75,000	6,00,000
Plantains ..	60,000	1,80,000	—	—
Chikoo ..	30,000	1,80,000	20,000	1,20,000
Gur ..	12,000	1,80,000	20,000	3,00,000
Cotton ..	—	—	24,000	9,00,000

Gur is exported to Saurashtra (50%), Bombay (10%), Ahmedabad (25%) and Surat district (15%). Cotton is mostly exported to Bombay and Ahmedabad.

In case of fruits the producers fix up as far as possible prices with merchants either at Amalsar or at Bilimora in advance. Fruits are exported to Bombay, Ahmedabad, Delhi and Saurashtra. Prices are fixed by *Hatha* system in case of gur and cotton. Village sales are also very common. Merchants and commission agents move from village to village and effect purchases. Delivery of the produce is given at the godowns of the respective purchasers or the general commission agents' as the case may be. The produce is weighed by persons employed by the buyers and in majortty of cases it is fradulent in favour of purchasers. The Kadada system both in rates and quantity is also in vogue.

The number of merchants are 10 and general commission agents 15 in Amalsar, and the same number is found in Bilimora. Merchants store the produce in their own godowns. Transport facilities, however, are not found adequate during the season. The usual commission charges are as under:

Commission charges	Fruits	6¼ %.
Weighing charges	,,	Rs. 0-0-6 per B. mds.
Weight allowance	,,	2 seers per maund.
Commission	Gur	6¼ %
Weight charges	Gur	Rs. 3-2-0 per 100 pots weighing about ¾ B. md.
Brokerage	Cotton	1 ¼ % per cart of 16 B. mds.
Mehta Sukhadi	,,	Rs. 0-8-0 per cart.
Dharmada	,,	Rs. 0-4-0.

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Navsari taluka.

Navsari is a taluka headquarters. It is surrounded by a countryside rich in black cotton soil which is highly suitable for the growth of best quality cotton. It has two big textile mills, oil mills, four ginning factories, metal works, bobin works, sewing machine factory and a few other industrial concerns. It is situated on the main line of the Western Railway and is one of the important business centres in Surat district. It has become one of the most important trade centres for 'Surati' cotton.

The turnover of the chief agricultural commodities collected at this trade centre is as under :

Cotton ..	.. 8,64,000	B.mds.	Rs.	27,00,000
Groundnut ..	.. 45,000	B.mds.	,,	6,80,000
Jowar ..	.. 1,20,000	B.mds.	,,	12,00,000
Tuver.. ..	.. 75,000	B.mds.	,,	7,50,000
Other pulses	.. 65,000	B.mds.	,,	6,50,000
Castor seeds	.. 10,500	B.mds.	,,	1,25,000

The produce is distributed as under :

Commodity	Ahmedabad.	Bombay.	Surat. (District)
Cotton	60 %	40 %	-
Groundnut ..	—	—	100 %
Jowar	—	—	100 %
Tuver	—	80 %	20 %
Other pulses ..	—	60 %	40 %
Castor seeds ..	—	—	100 %

Village sales are very common. Merchants or persons employed by them move from village to village to effect purchases. About 50% of the produce is brought for sale by agriculturists themselves and they effect the sales by open negotiations either personally or through a broker. The produce is weighed by persons employed by the purchasers. Those who sell their produce in the village have to give delivery at the respective godowns of the purchasers. Kadada system is very common. Produce is weighed in a gunny bag and 1½ seer is deducted for each bag whereas it actually weighs 3/4 seer.

There are about 20 commission agents, 70 merchants and 150 retailers in Navsari. As the produce is sold directly neither commission nor weighing charges are levied. However Re. 1 per bhar (12 Bengali maunds) is charged per cotton cart and 2½ seers are deducted for weighing charges.

Bardoli is situated on the Tapi Valley section of Western Railway and is only 20 miles from Surat. It is one of the most important wholesale trade centres for Bardoli taluka, Palsana taluka and Valod mahal of Surat district. Bardoli has its own Electric Power House and has some ginning and pressing factories, pulse mills, oil mills. and saw mills. Famous for its high quality grade of cotton, it exports a large quantity of cotton to various mills in India. This taluka, like Navsari, is now developing considerably in regard to the produce of plantains. There are two important co-operative sales societies. On an average, their annual turnover comes to about Rs. 12 to 15 lakhs.

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Bardoli Taluka

The turnover of the chief agricultural commodities collected at this trade centre is as under :

Commodities.	*Quantity.*	*Value.*
	B.mds.	Rs.
Cotton	1,86,600	69,75,000
Groundnut	15,900	2,54,400
Tuver	12,750	11,27,500
Val	1,02,550	10,24,500
Adad	6,450	69,500
Castorseed...	5,250	63,000
Jowar	75,000	7,50,000
Wheat	16,500	2,47,500

The produce is distributed as under :

Commodities.	*Ahmedabad*	*Bombay.*	*Surat* (district)
Cotton	60%	40%	—
Groundnut ...	—	—	100%
Tuver	—	80%	20%
Val	—	83%	17%
Adad	—	85%	15%
Castor seeds ...	—	—	100%
Jowar	—	—	100%
Wheat	—	—	100%

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Producers are accustomed to sell their produce in villages Most of the produce is sold there . Merchantse mploy their own itinerant *dalals* to effect purchases from villages. Weighment is done by persons employed by the buyers. No weighing charges are levied but *dalali* is Rs. 2-0-0 per cart. Kadada system in cash is very common. The last 3 to 4 seers of the meterial in a cart is not counted for payment. The latter is often daferred by one or one and a half month.

There are three commission agents, 50 wholesalers and 60 retailers in Bardoli taluka.

Valod Taluka

Valod is the taluka headquarters but Madhi which is lying on the Tapi Valley section of Western Railway is the business centre of this taluka. Some of the produce of Vyara taluka and Mandvi taluka is also sold through this market. The importaance of this place is much enhanced by the construction of Kakra par dam in the bed of River Tapi as the surrounding area is very suitable for agricultural production.

The turnover of the chief agricultural commodities collected at this trade centre is as under :

	B.mds.	Rs.
Cotton	1,00,200	1,23,50,000
Groundnut	27,000	4,32,000
Tuver	22,500	2,25,000
Val	30,000	3,00,000
Adad	9,750	97,500
Castorseeds	9,300	1,11,600
Jowar	35,000	3,50,000
Wheat	9,730	1,45,950

The produce is distributed as under :

Commodity.	*Ahmedabad*	*Bombay.*	*Surat (district)*
Cotton	60%	40%	—
Groundnut ...	—	—	100%
Tuver	—	80%	20%
Val	—	83%	17%
Adad	—	85%	15%
Castorseeds ...	—	—	100%
Wheat	—	—	100%

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This taluka is mostly inhabited by backward class Bhils. Village sales are very common. During the season merchants or persons employed by them move from village to village to effect transactions. Produce is weighed by persons employed by the buyers. Delivery of the produce is given at the merchants' godowns. Kadada system is very common. The last 3 to 4 seers of the meterial in a cart is not counted for payments. Payment is often deferred by one to one and half months.

There are about 10 commission agents, 30 wholesellers and 25 retailers. Transport facilities are hardly adequate.

Vyara Taluka

Vyara, the taluka headquarters, is a railway station on the Tapi Valley section of Western Railway but it has no good transport facilities so far as the villages of the taluka are concerned. It is connected with Unai (20 miles), Kanaja (10 miles) and Khorwada (20 miles) by roads which link most of the interior villages. The whole taluka is mostly inhabited by backward classes and adiwasi Bhils. Vyara is an important centre for timber trade.

The turnover of the chief agricultural commodities collected at this trade centre is as under :

Paddy...	42,000 B.mds.	Rs.	4,62,000
Cotton	36,000 B.mds.	,,	1,62,00,000
Groundnuts	9,000 B.mds.	,,	1,44,000
Tuver	12,000 B.mds.	,,	1,20,000
Val	4,500 B.mds.	,,	45,000
Adad and *Mag* ...	2,400 B.mds.	,,	24,000
Jowar	9,000 B.mds.	,,	90,000
Wheat...	3,750 B.mds.	,,	48,750

Songadh Taluka

Songadh is also a station on Tapi Valley Section of Western Railway. It has no good transport facilities so far as villages in the taluka are concerned. It is inhabited by backward class adivasi Bhils. Songadh is also an important centre for timber trade. The method of sale is just similar to that of the Vyara taluka. This area is more backward and is included for development under the National Extension Schemes.

The turnover of the chief agricultural commodites collected at this trade centre is as under :

Paddy...	45,000 B.mds.	Rs.	5,95,000
Cotton	12,000 B.mds.	Rs.	54,00,000
Groundnuts	3,000 B.mds.	Rs.	48,000
Tuver	10,500 B.mds.	Rs.	1,05,000
Val	750 B.mds.	Rs.	7,500
Adad and *Mag* ...	3,750 B.mds.	Rs.	37,500
Jowar	7,500 B.mds.	Rs.	75,000
Wheat	4,500 B.mds.	Rs.	67,500

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The produce is distributed as under :

	Ahmedabad.	Bombay	Surat (District)
Cotton	20%	15%	65%
Pulses	10%	—	90%
Other produce ...	-	—	100%

There are about 30 wholesale merchants and 40 retailers in this taluka.

Olpad Taluka.

Olpad is the taluka headquarters situated about 11 miles away from Surat. There are three important trade centres in this taluka viz., (1) Kim, (2) Sayan and (3) Olpad. These centres are well connected by road to each other and hence to Surat also. Moreover Sayan and Kim are railway stations on the main tract of Western Railway. Almost half of the surplus produce of Mandvi taluka is brought at Kim for sale and export, if any.

The turnover of the chief agricultural commodities collected at this trade centre is as under :

Commodities.	Kim		Sayan		Olpad	
	B. mds.	Rs.	B mds.	Rs	B. mds.	Rs.
Jowar	20,000	2,00,000	10,000	1,00,000	10,000	1,00,000
Wheat	2,000	30,000	2,000	30,000	2,000	30,000
Tur	9,600	96,000	9,600	96,000	9,600	96,000
Cotton	48,000	18,00,000	36,000	13,50,000	1,08,000	40,50,000

Except cotton, the surplus produce is exported to other parts of Surat district. Cotton is exported to Ahmedabad (75%), and Bombay (25%).

There are about 12 merchants in Kim, eight in Sayan and eight in Olpad. The method of sale is mostly wholesale. Foodgrains are mostly brought by agriculturists at marketing centres. Purchasers themselves weigh the produce and no weighing charges are charged. The usual commission charges in case of cotton are Re. 1-0-0 per *bhar* of 12 Bengali maunds. The Kadada system in kind is very common at all the above marketing centres.

Mangrol Taluka.

There are two important trade centres in this taluka, viz., (1) Mangrol and (2) Kosamba. The first is the taluka head quarters and is situated on the Kosamba-Zankhavav line. The second centre is situated on the main line of Western Railway.

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The commodities handled with approximate quantity and value are as under :

	Kosamba		Mangrol	
	B.mds.	Rs.	B.mds.	Rs.
Cotton	1,44,000	54,00,000	1,08,000	40,50,000
Groundnut ...	30,000	4,80,000	1,06,000	16,96,000
Mag & Chola ...	7,500	75,000	7,500	75,000
Gram	1,500	22,500	4,500	67,500
Castorseed ...	—	—	4,500	54,000
Tur	1,500	15,000	9,000	90,000

The business is both retail and wholesale. Village sales are very common. The number of merchants at these two centres is as under :

	Mangrol	Kosamba
Dalals ...	10	20
Merchants ...	5	15

REGULATED MARKETS.

To eliminate unfair practices in commercial transactions in agricultural produce, to provide for better regulation of buying and selling of agricultural produce an effort was made in the early thirties of this century by enacting the Bombay Cotton Markets Act. (XVII) in 1927 which was subsequently repealed and was replaced by 'The Bombay Agricultural Produce Markets Act (XXII) in 1939. The latter statute brought all agricultural commodities under regulation.

The Bombay Agricultural Produce Markets Act provides *inter alia* for the establishment of a particular area for a market committee consisting of 15 members, to issue licences and to recover licence fees from traders, general commission agents, weighmen, hamals and cartmen ; to regulate trade practices by fixing maximum trade allowances such as commission, brokerage, weighment, *hamali* etc., to collect cess from sellers on agricultural produce brought by producers and to settle disputes between traders and traders or traders and agriculturists or both.

Regulated Markets (Surat).

There is only one regulated market in Surat district viz., The Agricultural Produce Market Committee, Surat, Though the the committee was established on 11th May, 1951, it came into operation from 1st March, 1952. Due to their enjoyment of traditional advantages arising mostly from malpractices, traders were not willing to cooperate in the execution of the scheme. The Committee had to face a strike launched by traders for six days, but the strike could not last longer on account of the active cooperation of agriculturists, various cooperative organisations and the people.

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REGULATED MARKETS

The Agricultural Produce Market Committee consists of 15 members, seven from agriculturists' constituency, four from traders' constituency, one from local authorities' constituency and three government nominees. Trade in the following commodities has been regulated under this market. Leafy and fresh vegetables, condiments and spices and fruits (detailed list in table No. 8). The 1952-53 Audit Report contains a very important suggestion for applying the Market Act to mangoes and plantains but the recommendation could not be implemented due to shortage of space in the market yard.

The Market Act is applicable to all villages of Chorasi taluka. The market yard is situated at Dakal pole, Baranpuri Bhagole, Surat. The market yard consists of only 24,00 sq. ft. and some 40 General Commission Agents are working in it. This space is found to be very inadequate one and hence efforts are being made to acquire additional space.

The Market Committee owns the wholesale market and the retail market is owned by the municipality. There are about 400 to 500 daily attendants while the averge annual attendance is estimated by the Committee to be 1,44,000. The working hours are from 6. A. M. to 6. P.M.

Much to the disadvantage of agriculturists, *Hatha* system was prevalent before the market was regulated as also auction sale, which is now the only method of sale. Also the system of Baitala is eliminated. Now the basis of sale is a Bengali maund.

Agriculturists residing round about Surat bring their produce for sale in the market mostly during morning hours. Each head-load is auctioned by the general commission agents. Before auctioning, the general commission agent weeds out bad stuff. After auction, the name of the purchaser, price rate and weight of produce, are noted in a book kept by the general commission agent. Then the general commission agent prepares the bill inserting in it the weight, rate and the amount. Out of three copies, one is given to seller, one to market committee and third one is kept by the generral commission agent himself. Thus the total amount is either paid in cash to the seller or is credited to his account kept by the general commission agent. The general commission agent deducts the market cess and pays to the market committee. The market cess is to be paid by agriculturists. Commission is also deducted by the general commission agent in the bill. The general commission Agent on behalf of the committee, collected market cess worth:—

Rs. 4,823-0-0	for the year ending 31st August	1952.
Rs. 13,117-8-3	,,	1953.
Rs. 14,332-3-6	,,	1954.

The general commission agent sells the produce of agriculturists generally on credit to licenced purchasers and pays cash to the sellers, i. e. agriculturists. In some cases, some of the agriculturists take advance from the general commission agent. The A and B class traders i. e. retailers viz., shopkeepers, *lorriwalas* and *topalawalas* purchase from the wholesale market. Moreover some of the agriculturists themselves move with the headload (topla) and sell the vegetables in retail market. Table No. 7 shows the number of licence-holders in each category in 1951-52, 1952-53 and 1953-54.

As the area of market yard is much smaller than required, weighing is done only by spring balances. There are about 33 licenced weighmen in the yard. Committee's inspectors generally check the balances and thus there remains no scope for malpractices usually practiced by traders. The weighing charges are determined as Rs. 0-1-0 per Bengali maund after the application of the Market Act. And that too is to be borne by purchasers. According to the Committee's Annual Report (1951-52 and 1952-53) the net gain accrued to agriculturists due to the system of licenced weighman was Rs. 44,750 in 1951-52 and Rs. 94,046 in 1952-53.

Moreover commission charges are also regulated. Agriculturists have to pay Rs. 6 per cent as against Rs. 9-6-0 paid by them before the application of Market Act. Thus the agriculturist class gained Rs. 3-6-0 per hundred. The net gain accrued to agriculturists due to this is estimated by the Market Committee to be Rs. 2,71,853 in 1951-52 and Rs. 4,15,800 in 1952-53.

About 80 to 85 per cent of the produce is consumed locally and the rest is exported outside the district. The two main export markets are, Ahmedabad and Bombay. However, some vegetables like *Suran* and *Ratalu* (yam) are also exported to other cities. Table No. 8 gives the quantity of vegetables exported during 1953-54.

The table below gives the arrivals and sales of regulated commodities during the last three years. The table reveals that the arrivals increased from 358999 Bengali maunds in 1951-52 to 7,52,370 Bengali maunds in 1952-53 and to 9,01,642 Bengali maunds in 1953-54. The average total value of the said quantities was Rs. 52,11,720 in 1951-52, Rs. 1,15,55,644 in 1952-53 and Rs. 1,02,98,655 in 1953-54.

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REGULATED MARKETS

The annual average price of vegetables during 1951-52 was Rs. 22-8-0, Rs. 16-6-0 per Bengali maund during 1952-53 and Rs. 12-8-0 during 1953-54. While 1951-52 experienced scarcity of vegetables due to shortage of rains (25") the position was improved during 1952-53 though the shortage of vegetables was felt owing to incessant rains throughout the season (77"). 1953-54 witnessed a phenomenal increase in vegetable production due to favourable and timely rain (67") but prices were much reduced and some agriculturists even could not procure economic prices. Thus it would appear that vicissitudes of rain rather than prices is the controlling factor in vegetable droduction.

In order to be familiar with other markets, the committee has arranged to get price quotations of various vegetables daily from Ahmedabad. Moreover the market is also made familiar with Bombay prices. Day-to-day prices of all vegetables are written on the Board put in the market yard. But still there remains great divergence between maximum and minimum prices partly due to varieties of quality and partly due to competition in retail trade.

The practice of village sale was not prevalent even before the establishment of the regulated market. Today, as in the past, agriculturists bring their products to the market in head-loads.

Two cooperative societies of agriculturists dealing in fruits and vegetables have taken licences of general commission agents. One of them sells vegetables on commission basis while the other engages itself in exporting vegetables on commission basis. The total turnover of these societies during the last three years was as follows :

1951-52	... 4843 Bengali Mds.
1952-53	... 26170 ,,
1953-54	... 49165 ,,

TABLE No. 7

STATEMENT SHOWING LICENCE FEES AND NUMBER OF LICENCE HOLDERS IN 1951-52, 1952-53 AND 1953-54.

Category of Licence Holders.	Licence fees.	1951-52 No. of licence holders	1951-52 Total licence fees.	1952-53 No. of licence holders	1952-53 Total licence fees.	1953-54 No. of licence holders	1953-54 Total licence fees.
			Rs.		Rs.		Rs.
'A' Class — General Commission agent (Turnover more than 2,500 B. mds. per annum) ...	100	26	2,600	30	3,000	33	3,300
'B' Class — General Commission agent (Turnover less than 2,500 B. mds. per annum) ...	50	12	600	8	400	5	250
'A' Class Trader (Turnover more than 2,500 B. mds. per annum) ...	100	5	500	14	1,400	11	1,100
'A' Class Trader (Turnover less than 2,500 B. mds. per annum) ...	50	8	400	11	550	13	650
'B' Class Traders :—							
1. Shopkeepers ...	12	137	1,644	91	1,092	71	852
2. Lariwalas ...	5	107	535	115	575	125	625
3. Toplawalas ...	3	1,135	3,405	1,038	3,114	821	2,463
4. Tolat ...	15	29	435	33	495	33	495
5. Marfatia ...	50	1	50	2	100	2	100
		1,460	10,169	1,342	10,726	1,114	9,835

TOTAL TURNOVER OF TWO COOPERATIVE SOCIETIES WHICH HAVE TAKEN LICENCES OF GENERAL COMMISSION AGENT

Year		Bengali Mds.	Value in Rupees
1951-52	...	4,843	1,10,968
1952-53	...	26,170	4,28,534
1953-54	...	49,165	6,14,562

CHAPTER 8. Trade. REGULATED MARKETS

TABLE No. 8

STATEMENT SHOWING THE VEGETABLES PRODUCED IN THE DISTRICT AND THEIR EXPORT IN 1953—54

NAME OF THE VEGETABLES.		1951-52.		1952-53		1953-54.		Export in 1953-54.	
English	Gujarati	Quantity B. Mds.	Value in Rupees	Quantity B. Mds.	Value in Rupees	Quantity B. Mds.	Value in Rupees	Average Price	B.Mds. S.
Potato	Batata ...	1,01,006	12,87,852	2,01,359	38,25,821	1,89,201	22,94,060	12-2-0	80,543-26
Sweet Potato ...	Sakaria ...	3,063	18,378	12,425	1,11,825	13,437	1,00,777	7-8-0	2,816-0
Elephant foot... ...	Suran ..	1,981	61,696	15,360	1,38,240	19,574	1,27,231	6-8-0	3,486-33
Yam	Ratalu ...	490	11,760	4.574	96,054	5,297	79,470	15-0-0	557-29
Onions	Kanda ...	94,504	4,72,520	1,37,168	9,60,176	1,96,298	12,26,803	6-4-0	52,165-22
Tomato	Tomata ...	2.636	44,812	21,839	3,27,585	33,032	3,55,094	10-12-0	5,627-16
Brinjal	Vengan ...	16,478	1,43,520	51,924	5,71,164	58,847	5,44,335	9- 4-0	4,172-15
Cabbage	Kobij ...	2,417	24,170	22,665	2,26,650	54,613	4,36,804	8- 0-0	22,918-24
Flower	Falawar ...	258	2,961	8,977	1,25,678	8,134	75,240	9- 4-0	1,593-5
Edible Hibiscus ...	Bhinda ...	5,908	1,29,976	13,499	2,96,978	11,372	1,87,638	16- 8-0	2.132-7
	Guwar singh ...	13,105	1,44,155	20,889	2,50,568	16,723	1,33,784	8- 0-0	1,899-9
	Fansi ...	2,283	4,79,403	19,36	25,168	2,600	29,900	11- 8-0	35-5
Vinga catiag ...	Choli ...	1,968	35,424	50,31	75,465	3,139	29,821	9- 8-0	7-69
Large fruited dalichos	Valor ...	138	1,932	67,86	81,432	3,445	32,728	9- 8-0	
...	Papdi ...	441	1,125	70,94	1,84,444	17,174	2,96,252	17- 4 -0	2,661-0
Pigeon peas ...	Tuver lili ..	76	1,425	46,32	78,744	6,527	52,216	8- 0-0	716-18

Small red gourd ...	*Giloda* ...	10,670	1,17,381	21,460	2,14,600	21,939	1,70,027	7-12-0	5,305-18
Bottle gourd	*Dudhi* ...	25,665	3,27,216	43,980	4,83,780	46,568	2,85,229	6- 2-0	12,256-34
Towel gourd ...	Karelan ...	7,982	1,19,730	10,670	1,49,380	8,114	99,397	12- 4-0	19,61-20
	Saragawa ...	461	1,725	502	2,008	218	2,834	13- 0-0	
Towel gourd ...	Turia ...	3,139	40,807	6,195	74,340	5,444	48,996	9- 0 -0	11,45-29
	Parwal ...	12,816	3,84,480	17,726	4,78,602	33,680	6,31,500	18-12-0	22,766-35
	Chibhada ...	4,347	26,082	9,062	81,558	16,414	1,02,588	6- 4-0	3,712-34
Large red gourd ...	Kohlu ...	4,806	19,224	7 318	43,908	6,704	31,858	4-12-0	817-18
Cucumber	Kakadi ...	1,637	21,281	1,133	12,463	757	6,813	9- 0-0	
	Kantola ...	485	18,430	888	24,864	989	18,297	8- 8-0	
	Tindora ...	1,094	6,564	959	6,713	973	4,135	4- 4-0	311-12
Carrot	Gajar ...	508	2,286	1,567	26,639	561	1,683	3- 0-0	
	Mogri ...	—	—	938	16,884	1,442	24,154	17- 0-0	9-29
Field pea	Vatana ...	462	14,784	3,037	69,851	1,937	35,350	18- 4-0	68-8
Chillies	Marcha ...	16,852	4,38,152	43,638	8,72,760	52,638	12,89,631	24- 8-0	3,445-21
Ginger	Adu ...	4,744	2,03,992	13,850	5,40,150	18,988	5,88,628	31- 0-0	577-26
Green Turmeric ...	Haldhar lili ...	1,178	14,136	3,450	41,400	3,629	50,806	14- 0-0	409-30
Garlic	Lasan ..	12,889	5,02,671	19,261	7,51,179	31,005	6,27,851	20- 4-0	8,201-19
Green Coriander ...	Kothmir ...	250	12,500	4,577	91,540	5,036	1,28,418	25- 8-0	
Lemon	Limbu-Kagadi ...	2,262	79,170	6,001	1,98,033	5,189	1,47,887	28- 8-0	861-18
	Total ...	3,58,999	52,11,720	7,52,370	1,15,55,644	9,01,642	1,02,98,655		2,45,357-29

Note : Figures under heads 'Average price' and 'Export in Bengali mds.' refer to the year 1953-54.

CHAPTER 8.

Trade.

WEEKLY BAZARS OR PERIODICAL MARKETS

In assembling and distributing goods, next to the wholesale trade centres, come the market places or weekly and periodic bazars as they are called, held at different places and on different days in the district. In many villages and towns, a market is periodically held once or twice a week or on a fixed day. There the sellers bring their goods and the residents of the area get the facility of purchasing articles which otherwise are not generally available in that area.

The total number of bazars held in the district is 97. Surat, being the headquarters of the district, serves as a marketing centre to most of the talukas. The value of the total turnover at these bazars shows a wide range from Rs. 50 to Rs. 7,000; and the number of persons attending these bazars also varies between 200 and 3000. Particular mention may be made of the following places where considerable business is transacted viz., Motiwada (Rs. 5,000), Chhibhadkachh (Rs. 7,000), in Pardi taluka; Vyara (Rs. 4,000), in Vyara taluka and Amba (Rs. 3,000) in Mandvi taluka etc. There are no bazar places in Kamrej and Olpad talukas. People from these two talukas attend the bazars held at Surat and Bardoli.

The following table gives a list of villages and towns (talukawise) where such periodical bazars are held.

TABLE No. 9.

TABLE SHOWING MARKET PLACES AND THE DAY ON WHICH BAZAR IS HELD (SURAT DISTRICT)

Name of Taluka or Peta. 1	Names of village or town where Bazar is held. 2	Day on which Bazar is held. 3
1. Bansda ...	1. Khambhala ...	Tuesday
	2. Anklach ...	Saturday
	3. Bansda ...	Friday
	4. Unai ...	Tuesday
	5. Chorwani ...	Thursday
	6. Vaghabari ...	Thursday
	7. Limazar ...	Sunday
	8. Moti Valzar ...	Monday
	9. Kharjai ...	Wednesday
	10. Vaghai ...	—
2. Bardoli ...	1. Kadod ...	Sunday
	2. Surali ...	Thursday
3. Bulsar ...	1. Bulsar	—
	2. Navera ...	Sunday
	3. Dungri ...	—
	4. Chichai ...	Saturday
	5. Faldhara ...	Sunday
	6. Vagaldhara	—
4. Chikhali ...	1. Chikhali ...	—
	2. Khergam ...	—
	3. Fadvel ...	Friday
	4. Kangwa ...	Friday
	5. Chapalodhara ...	Saturday
	6. Vad ...	Wednesday
	7. Rankuva ...	—
	8. Bamanwada ...	Monday

TABLE No. 9 (Contd.)

Names of Taluka or Peta. 1	Names of village or towns where Bazar is held. 2	Day on which Bazar is held. 3
5 Chorasi ...	1. Surat ...	Saturday
6. Dharampur	1. Dharampur ...	Monday
	2. Nanivahial ...	Thursday
	3. Huda ...	Tuesday
	4. Siadha ...	Saturday
	5. Ukta ...	Sunday
	6. Rajpuri Jungle ...	Thursday
	7. Mandava ...	Friday
	8. Sukhla ...	Friday
	9. Bopi ...	Friday
	10. Varva ...	Sunday
	11. Ozar ...	—
	12. Lavkar ...	Sunday
	13. Amba Talat ...	—
	14. Pendha ...	—
	15. Mota Pondha ..	Thursday
7. Gandevi ...	1. Bilimora ...	—
	2. Gandevi ...	Wednesday
	3. Gandeva ..	Wednesday
	4. Saribujarng ..	—
8. Mahuva ...	1. Dholikui ...	Sunday
	2. Anaval ...	Wednesday
	3. Valvada ...	Sunday
	4. Mahuva ...	Monday
	5. Kharvan ...	Saturday
	6. Gangadia ...	Monday
	7. Kankaria ..	Friday
9. Mandvi ...	1. Mandvi ..	Wednesday
	2. Amba ...	Saturday
	3. Pipalvada ...	Saturday
	4. Devgadh ...	Thursday
	5. Bodhan ...	Monday
10. Mangrol ...	1. Umerpada ...	—
	2. Wankal ...	Friday
	3. Mangrol ...	—
	4. Zankhvav ...	—
	5. Kosamba ...	—
	6. Velachha ...	—
	7. Keori ...	—
	8. Hathuran ...	—
11. Navsari ...	1. Navsari ...	Sunday
	2. Abrama ...	—
	3. Maroli ...	—
	4. Jalalpore ...	—
12. Palsana ...	1. Palsana ...	—
	2. Chalthan ...	—
	3. Baleshwar ...	—
	4. Veshma ...	—
13. Pardi ...	1. Vapi ...	—
	2. Udwada ...	Tuesday
	3. Lakhampore ...	Saturday
	4. Sukhlav ...	Friday
	5. Chhibhadkachh ...	Sunday
	6. Rohina ...	Thursday
	7. Pardi ...	—
	8. Motivada ...	Tuesday
	9. Pandore ...	Wednesday

CHAPTER 8.

Trade.

WEEKLY BAZARS OR PERIODICAL MARKETS.

TABLE No. 9 (Contd.)

Names of Taluka or Peta 1	Names of village or town where Bazar is held 2	Day on which Bazar is held 3
14. Songadh ...	1. Songadh ...	Sunday
	2. Singpur ...	Monday
	3. Umarda ...	Tuesday
	4. Bandharpada—Mota ...	Monday
15. Valod ...	1. Buhari ...	Wednesday
	2 Valod ...	Friday
	3. Kamalchhod ...	Sunday
16. Vyara ...	1. Vyara ...	Saturday
	2. Balpur ...	Monday
	3. Pipalwada ...	Monday
	4. Panchol ...	Friday
	5. Khodtalav ...	Friday
	6. Raigadh ...	Saturday
	7. Vadkui ...	Tuesday
Total ...	97	

Where a specific day is not indicated in the table the bazar day at these places is not a fixed one.

VILLAGE SHOP-KEEPERS.

Village shop-keepers occupy an important place in the organisation of trade in villages of a district. Almost every village has one or more shops providing its inhabitants with their day-to-day requirements.

The following table gives the estimated number of shops in villages and non-municipal towns of the district. These shops include grocery, cloth shops, hotels and pan-bidi shops, soda fountains, tobacco and leather shops, but a majority of them are grocery shops.

There are eighteen talukas and petas in this district having a total of 1938 villages. Taking the district as a whole, there are three shops per village on an average. Valod and Gandevi talukas have respectively the high average of ten and nine shops per village. Bansda, Dharampur, Mandvi and Vyara talukas have got a low average of one shop per village. Songadh taluka has got the lowest number of shops as most of the villages of the taluka are very thinly populated. Particular mention may be made of the following places where there is a greater concentration of shops. Bulsar-200 ; Bilimora-200 ; Gandevi-125 ; Dharampur-110 ; Kathor-83 and Rander-76.

Except grain which he buys from local producers, the village shop-keeper brings his stock-in-trade from large towns with which he has established business relations and from where possibly he can get credit facilities.

His stock-in-trade includes grains, groceries, sugar, salt, gul, vegetables, oils, ghee, spices, coconuts, washing soap, tea, tobacco, betel-nut, chillies and other articles required by people for daily use. Barter system is not in practice. Articles are purchased mostly on payment of ready cash, but in some cases customers are allowed a running account to be settled periodically. Thus the shop-keeper also in effect acts as a small money lender.

All shop-keepers usually have a place of business in the centre of the village or town. The smaller shop-keepers move from one place to another within a radius of ten to fifteen miles of their shops to buy and sell their articles.

The following table shows the dispersal of shops in Surat district—(talukawise) (1954-55) :

TABLE No. 10

Names of Taluka or Peta	No. of villages	No. of shops	Names of Taluka or Peta	No. of villages	No. of shops
Bansda	92	168	Mandvi	136	196
Bardoli	81	342	Mangrol	150	369
Bulsar	91	428	Navsari	139	833
Chikhli	87	371	Olpad	102	265
Chorasi	108	593	Palsana	49	125
Dharampur ...	238	207	Pardi	82	413
Gandevi	55	548	Songadh	206	61
Kamrej	69	250	Valod	40	402
Mahuwa	66	158	Vyara	147	215
Total Villages ... 1,938					
Total No. of Shops ... 5,944					

CHAPTER 8.

Trade.

VILLAGE SHOP-KEEPERS

The following table shows the classification of shops in Surat district :

TABLE No. 11

Name of the Taluka	Grocery shops	Cloth shops	Cutlery shops	Hotels and Pan-Bidi shops	Miscel-laneous	Total
Bansda	117	18	12	11	10	168
Bardoli	173	39	15	39	76	342
Bulsar	222	59	30	32	85	428
Chikhali	195	25	20	34	97	371
Chorasi ...	359	24	27	56	127	593
Dharampur	129	20	10	20	28	207
Gandevi	212	65	25	95	151	548
Kamrej	109	32	15	61	33	250
Mahuwa	94	19	7	4	34	158
Mandvi	79	12	19	30	56	196
Mangrol	170	29	23	35	112	369
Navsari	397	93	47	171	125	833
Olpad	127	27	9	13	89	265
Palsana ...	66	15	6	4	34	125
Pardi	276	39	20	18	60	413
Songadh ...	36	—	--	4	21	61
Valod ...	197	40	25	74	66	402
Vyara	164	27	—	—	24	215
District Total ...	3,122	583	310	701	1,228	5,944

SALES TAX

The following statement compiled from the quarterly statistical returns of sales tax, under the Bombay Sales Tax Act, 1946 gives an idea of the volume of business done by big shops, in the whole of the district excluding Surat, Navsari. Rander, Bulsar, Bilimora, Gandevi and Vyara towns, the account of which is given elsewhere in the chapter.

Since the turnover of most of the retail shops in the district did not reach the minimum prescribed for registration under the Sales Tax Act (Rs. 10,000/- in case of importers and Rs. 30,000/- in case of other dealers), quite a good number of retail shops fell outside the scope of the statement. During the period under review i. e. June 1952 to March 1953, there were 3400 dealers registered under the Act and their total turnover amounted

to Rs. 9,61,39,000. Most of the dealers fell under the categories of "Foodstuffs and Hotels" and "Clothing and Consumer goods". The table reveals that out of the total number of registered dealers, those under "Foodstuffs and Hotels" formed the largest group (1566) with a total turnover of Rs. 3,61,66,000/- followed by those under "Clothing and Consumer goods" (1127) with a total turnover of Rs. 3,96,04,000. The next group of dealers fell under the category of "Building materials" and were found in 15 talukas; their number was 548 and total turnover Rs. 1,16,43,000. There were however no dealers registered in the group of "Transport and vehicle goods". Dealers under the group "Machinery and Capital goods" were found only in Chorasi, Pardi and Vyara talukas. Dealers under the group of "Fuel and Power" (73) were found in most of the talukas and their total turnover was Rs. 26,16,000, while those in the category of "Industrial Commodities" were found only in six talukas viz. Bulsar, Chikhali, Chorasi, Palsana, Pardi and Songadh.

CHAPTER 8.

Trade.

SALES TAX

TABLE No 12

STATEMENT SHOWING THE NUMBER OF REGISTERED DEALERS AND THEIR TOTAL TURNOVER FOR THE DISTRICT FOR THE PERIOD 30TH JUNE 1952 TO 31ST MARCH 1953 (EXCLUDING SURAT CITY AND RANDER, NAVSARI, BULSAR, BILIMORA, GANDEVI AND VYARA TOWNS)

(Figures of Gross Turnover in Thousands.)

Area	Foodstuffs and Hotels		Clothing and Consumer Goods.		Building Materials		Transport and Vehicle Goods		Machinery and Capital Goods		Fuel and power		Industrial Commodities		Miscellaneous Goods		Total All Commodities	
	No	G T O	No	G.T O.	No	G.T.O.	No	G.T O.	No.	G T O.	No.	G T.O	No.	G.T.O.	No.	G.T.O.	No.	G.T.O.
1. Bansda Taluka	21	648	29	468													50	1,016
2. Bardoli Taluka	313	11,987	256	13.766	131	2,199					14	222					714	28,174
3. Bulsar Taluka	14	655	4	67	39	1,014					3	74	4	66			64	1,876
4. Chikhli Taluka	39	1,844	24	327	10	291					17	190	4	79	7	74	101	2,805
5. Chorasi Taluka	129	1,054	166	12,403	15	789			4	91	1	13	36	1,710	2	2	353	16,062
6. Dharampur Taluka	5	29	10	354													15	383
7. Gandevi Taluka	30	557	11	374	8	482											49	1,373
8. Kamrej Taluka	89	1,057	54	477	5	51					4	31					152	1,619
9. Mahuwa Taluka	69	692	5	30	3	46											77	768
10. Mangrol Taluka	92	1,264	106	2,425	78	2,018					4	135					280	5,842
11. Mandvi Taluka	96	742	64	822	25	480									1	2,222	186	4,266
12. Navsari Taluka	53	2,071	30	525	11	68									7	1,475	101	4,139
13. Palsana Taluka	81	1,210	19	481	116	2,230							2	3			218	3,924
14. Pardi Taluka	73	3,096	64	1,815	25	808			3		25	1,879	5	81	9	260	204	8,054
15. Olpad Taluka	139	4,547	129	4,102	21	156				15							289	88,05
16. Songadh Taluka	118	1,657	53	551	21	243					3	35					195	2,486
17. Valod Peta	51	201	33	74													84	275
18. Vyara Taluka	154	2,895	70	543	40	768			2	32	2	37					268	4,275
TOTAL ...	1,566	36,166	1,127	39,604	548	11,643	...		9	138	73	2,616	51	1,939	26	4,033	3,400	96,139

There are a large number of fairs associated with important deities and religious festivals, at which considerable quantities of agricultural produce and other articles of daily use are brought for sale. These fairs have not only ecomomic but also sociological significance in as much as, apart from providing an excellent opportunity for trading, they also satisfy religious cravings and feelings and serve as a very healthy common ground for social and cultural intercourse among all kinds of people. Though generally associated with deities and festivals of particular religion, fairs sometimes bring together even people professing different faiths. With the process of industrialisation and urbanisation gathering momentum and the consequent growth of organised trading activities, the importance of fairs can be said to be now on the decline.

Fairs provide a temporary common market-place for persons attending them. They last for a day or two with an attendence varying from 200 persons to 60,000 persons, and with a sale of Rs. 55 to Rs. 75,000. The details are as follows : Of the 91 fairs that are held in this district, 2 are held in Bansda Taluka, 5 in Bardoli, 15 in Bulsar, 6 in Chikhali, 3 in Chorasi, 12 in Gandevi, 2 in Kamrej, 3 in Mahuwa, 6 each in Mandvi and Mangrol, 13 in Navsari, 3 in Olpad, 2 each in Pardi and Palsana, 9 in Songadh and 2 each in Valod and Vyara Talukas. There are no fairs in the taluka of Dharampur.*

Fairs can be regarded as the chief distributing centres of articles varying from bare necessities to luxuries. Besides local shop-keepers, intinerant merchants, cultivators and petty shop-keepers from the neighbourhood constitute the bulk of sellers. Buyers are usually the residents of the village or town and its neighbourhood and pilgrims from even distant places. A wide range of articles from basic necessities of life to luxuries and comforts are offered for sale at these fairs, particularly at large ones. Here cereals, and pulses, vegetables, sugar, fruits, tobacco and betel-leaves, tea, coffee and cold drinks, farsan and sweets are available. In large fairs, usually attended by large number of persons, luxury articles like costly ready made clothes, artificial pearls and beads and similar other articles are offered for sale. Particular reference may be made to important fairs held at the following places: Soras in Oplad taluka, Mangrol in Mangrol taluka, and Vyara in Vyara taluka, where a considerable amount of business is transacted. Transactions are always on a cash basis at all these fairs.

The following table shows fairs held in Surat district:

*Taken from the account of fairs submitted by the Collector, Surat.

CHAPTER 8.

Trade.
Fairs

TABLE No. 13

STATEMENT SHOWING FAIRS HELD IN SURAT DISTRICT

Taluka 1	Names of villages or town where fair are held. 2	No. of fairs. 3	Names of fairs. 4	Average Turn-over. 5	Attendence. 6
				Rs.	
Bansda ..	Unai	2	(a) Makarsankranti fair	3,800	2,500
			(b) Chaitra fair	8,970	7,000
	Total .	2			
Bardoli ..	Kadod ...	1	Jal Jatra ...	625	3,000
	Kholi	1	Kedareshwar fair	200	1,000
	Mota ...	1	Rameshwar Mahadev fair	625	3,000
	Waghecha Kadod ..	2	(a) Waghecha Mahadev fair ...	370	500
			(b) Dasera fair ...	700	1,000
	Total ...	5			
Bulsar	Bhadeli Jaglala	1	Hingraj Mataji's Mela ...	200	1,000
	Bhagal ..	1	Sungvi Mataji's Mela ...	3,000	2,000
	Bhagdawada	1	Mahalaxmi Mataji's Mela	75	300
	Bulsar ..	2	(a) Sati Mataji's Mela ...	3,750	3,000
			(b) Dasera fair ...	2,750	3,500
	Chanvar ...	1	Shivratri Mela ..	450	200
	Gadhoi	1	Gangaji Mela ...	250	200
	Kachwada	1	Kalichaudash Mela ..	1,500	3,000
	Kosamba ...	1	Ranchhodji Mela ...	80	300
	Parnera	1	Peros Mela ..	800	2,000
	Pathri ..	1	Mota Atham ...	250	1,500
	Pitha ..	1	Kali Chaudash Mela ...	1,500	3,000
	Saron ..	1	Kalichaudash Mela ...	450	500
	Tithal ...	1	Somvati Amas Mela ...	450	1,500
	Untadi	1	Sungvi Mataji's Mela	500	2,000
	Total ...	15			
Chikhali	Baroli .	1	— ...	2,600	3,000
	Fadvel ...	1	Mallika Arjun Mahadev Mela ...	750	700
	Majigam	1	Do.	800	2,000
	Nandhai	1	Shivratri fair ...	12,000	7,000
	Panikhadak	1	Bhavani Mata's fair ...	3,500	5,000
	Zari ...	1	Mallika Arjun Mahadev Mela ...	2,750	2,000
	Total ...	6			
Chorasi .	Bhimpore	1	Hanumanji's fair ...	550	300
	Mota ...	1	Kunvani Jatra ...	7,500	5,000
	Umra	1	Ramnath Ghelaji Jatra	1,000	2,000
	Total ...	3			

TABLE No. 13 (contd.)

1	2	3	4	5	6
				Rs.	
Gandevi ...	Amalsad ...	1	Dev Divali's Mela ...	210	1,000
	Antalia ...	1	Mata's Mela ...	125	750
	Bigri ...	1	Durga Mata's Mela ...	875	2,500
	Bilimora	1	Divali's Jatra ...	650	700
	Desra	1	Durga Mata's Mela	875	2,500
	Gandevi	1	Dasera Mela ...	112	300
	Kachholi ...	1	Maha Shivratri Mela ...	295	1,600
	Kolva ...	1	Aso Vad Chaudash Mela	115	1,400
	Masa	1	Kalika Mata's Mela ...	550	1,200
	Rahej ...	1	Sati Mata's Mela ...	375	1,000
	Saribujrang	1	Andeshwar Mahadev's Mela ...	375	1,500
	Undach ...	1	Kalika Mata's Mela	1,750	3,000
	Total ...	12			
Kamrej ...	Dhoran ...	1	Gaypagla fair ...	100	800
	Timba ...	1	Gatteshwar fair ...	125	1,000
	Total ...	2			
Mahuwa ...	Mahuva ...	1	Chaitra Sud Punam fair ...	900	500
	Naldhara	1	Gangnath fair ...	9,000	12,000
	Vaghesar	1	Kali Chaudash fair ..	400	400
	Total ...	3			
Mandvi ...	Bodhan ...	2	(a) Gunteshwar fair ...	2,500	1,500
			(b) Sinhastha fair ...	5,000	4,500
	Badtal	1	Hanumanji fair ..	300	200
	Mandvi ...	3	(a) Ashapuri Mata's fair...	1,250	300
			(b) Bihari Balaji's fair ...	1,250	300
			(c) Sindhwai Mata's fair	1,250	300
	Total	6			
Mangrol	Asharama	1	Ganeshpar fair ...	60	100
	Chokunda	1	Panch Kanth Mahadev fair ...	14,500	2,200
	Kothawa	1	Pir Mukh Mirja Bava Uras ...	2,500	3,000
	Kunverda	1	Bala Pir Uras ...	315	1,200
	Mangrol	1	Pir Mota Miya Uras ...	5,500	5,000
	Siyalaj ..	1	Bhola Pir Uras ...	275	1,000
	Total ...	6			
Navsari ...	Astagam ...	1	Hanuman fair ...	900	2,000
	Taiwad	1	Tabut fair ...	125	400
	Dandi	2	(a) Sea fair on Somvati amas ...	125	300
			(b) Hajani Bibi's fair ...	62	150
	Eroo	1	Mahalaxmi Mata's fair	2,500	5,000
	Jalalpore	1	Purneshwar Mahadev's fair ...	900	1,200
	Kharsad ...	1	N.A. ...	125	250
	Navsari ... (Lunsikui)	3	(a) Dasera fair ...	1,900	3,000
			(b) Chandi Parva ...	2,750	4,500
			(c) Manekthali Purnima fair ...	2,750	4,200
	Rajwada	1	Hanuman fair ...	900	2,000
	Sarona ...	1	Shivratri fair ...	175	250
	Vijalpore	1	Ashapuri Mata's fair ...	1,750	800
	Total ...	13			

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Trade.
FAIRS

1	2	3	4	5	6
				Rs.	
Olpad	Olpad ...	1	Kutaymata Mata fair	15	200
	Saras	1	Siddhanath Mahadev's fair.	12,500	8,000
	Sayedla	1	Baliyadev fair ...	5,500	4,000
	Total ...	3			
Palsana	Malekpore	1	Hanuman fair ...	900	2,000
	Palsana ...	1	Chaitra Sud Punam fair...	N. A.	N. A.
	Total ...	2			
Pardi	Palsana	1	Gangaji fair	22,500	10,000
	Lawachha ..	1	Holi fair ...	32,000	10,000
	Total ...	2			
Songadh	Bandharpada	1	N. A. ...	5,250	8,000
	Devalpada	1	Do. ...	395	3,000
	Don	1	Do. ...	500	1,000
	Jamapur	1	Do. ...	550	1,700
	Khadi	1	Do. ...	340	1,000
	Singhpur ...	1	Singhpur fair ...	675	2,000
	Songadh	1	Songadh fair ...	55	1,500
	Tokarva ...	1	N.A. ...	425	1,200
	Umarda ...	1	N.A.	700	2,000
	Total	9			
Valod	Buhari ...	1	N. A. ...	1,750	3,000
	Valod ...	1	Do. ..	4,600	3,000
	Total ..	2			
Vyara ...	Balpur ...	1	Maha Shivratri fair ...	20,000	25,000
	Vyara ...	1	Pirkhaial fair .	75,000	60,000
	Total ..	2			
	Total	91			

PEDLARS.

Pedlars have been playing an important role since olden times in the trade organisation of the district. But the old type of pedlars hawking their goods from one village to another has lost its previous importance. The villagers who used to patronise these pedlars now show a definite preference for periodical markets or for established shopkeepers. As far as economically advanced talukas are concerned, villagers now obtain their daily necessities from village shopkeepers or bring them from nearby towns or taluka headquarters, as transport facilities have been much developed during the post-war years. The practice of keeping annual credit accounts by agriculturists with village shopkeepers has become popular nowadays. Agriculturists generally pay the amount from the income of cash crops and/or there is also a practice of selling the surplus produce to village shopkeepers. The system of periodical or weekly bazars is prevalent in less advanced areas of Surat district viz., Bansda, Mandvi, Songadh. Vyara, Mahuwa, Dharampur, Mangrol and Valod. The inhabitants of these talukas are mostly Raniparaj Adivasi Bhils like Dublas, Kolis, Chaudharas, etc. They are very backward and do not prefer to stay in regular villages but live isolated in huts constructed in their own farms or provided by their masters. Under such circumstances pedlars have little chance to operate and

PEDLARS'

people generally purchase their necessities from periodical or weekly markets held at their village or round about. The system of staying at their own farms is also prevelent in advanced Bagayati villages of Surat District.

But pedlars still play quite an important role in the trade organisation of the district though their system has undergone considerable changes in recent years.* In olden days pedlars belonged to certain specified classes namely Muslims, Marwaris, Banias, Gujaratis etc. A significant change in this respect has been that Marwari and Lohana banias who were once quite predominant as pedlars have given up this form of trade. Most of them have settled down in villages and towns as shopkeepers and their place has been taken by displaced persons, Madrasis, Kashmiris, Adivasis, Muslims, Harijans, Khatris, Kachhiyas etc. The articles which are hawked have also changed their pattern. Pedlars now hawk daily consumption goods like fruits, vegetables, fishes, biscuits and other confectionery goods instead of clothes, cutlery, grocery, utensils, ornaments, glassware etc. However, it would not be correct to say that pedlars hawking in the latter group of goods are non-existent.

Pedlars usually move from village to village in fair weather months and return to their respective places before the monsoon sets in. Most of the pedlars belong to the district itself except Madrasis and Kashmirs. They usually carry their goods on their own shoulders personally or engage a labourer. Some also use bullock carts, cycles or *Hathgarries* (4 wheeled) etc., whereas use of motor service is also common wherever such facilities are there. Some 85% of the pedlars in Surat district carry the goods on their own shoulders. They are usually known to their customers.

There are different types of pedlars, each type handling a particuler type of commodities. The Marwari banias generally trade in grocery and cloth, Muslims in cloth, cutlery perfumery, hoziery and glass-ware, displaced persons in cloth, biscuits, fruits, vegetables, ice, kulfi etc., Khatris in handloom cloth, Kachhiyas in vegetables, Madrasis in cotton and artificial silk cloth, Kashmiris in woollen cloth and shawls and Maharastrian Prabhu women in indigenous herbs and medicines. Most of the transactions are done on a cash basis though the system of barter does prevail in case of pedlars hawking in utensils and glassware who exchange it with used clothes.

VOLUME OF TRADE

Volume of trade of a district could be ascertained only when accurate statistics regarding exports and imports are available. All that is available at present in this respect are figures about the volume of imports and exports based on octroi returns in a few municipal towns. A majority of Surat district munici-

*However the system of peddling from village to village does not seem to exist in all the 18 talukas of the district. The following four talukas viz., Mahuwa, Songadh, Bansda and Vyara reported that they had no pedlars largely due to the predominence of weekly bazars.

CHAPTER 8.

Trade.

VOLUME OF TRADE.

palities have not levied taxes on exports and hence such figures are not available. Generally octroi is collected only for imports and imports are mainly for consumption within the town. Though most of the municipalities have levied octroi duties, the commodities so taxed and commodities included in each *commodity group* are not uniform. Commodities are grouped with reference to local importance. e.g. oilseeds-it is grouped as one commodity by Surat Municipality while in Bulsar it is grouped under two categories--groundnuts with shells (*Mugfalli*) and seeds of groundnuts. Also while some taxes are levied *ad valorem* and hence the figures supplied for imports are in terms of value, some taxes are levied on actual quantum of imports. Some municipalities have not furnished figures of octroi returns for certain years either because octroi duties were not levied at all or realisation of octroi was auctioned to highest bidder and recovery of the same was made by the contractor.

With these limitations, below are given the figures of imports and exports of various commodities in the municipal towns of Surat district viz., Surat, Navsari, Bulsar, Bilimora, Rander, Gandevi, Vyara and Dharampur. The Shops and Establishments Act of Government of Bombay is applicable to the first four of these municipalities and hence except these four municipalities, information supplied by other municipalities is not so exhaustive. Figures of octroi returns of Kathor municipality are not given as octroi was not levied by it.

With the limitations mentioned in the above paragraphs, it is difficult to detect a general trend. Neverthless some guesses can be hazarded. It seems that during the post -war years there has been a steady increase in imports of almost all commodities. This is particularly true in the case of large towns such as Surat and Navsari and important trade centres like Bilimora and Bulsar.

Almost all the municipal returns reveal that imports of pure ghee have declined. Vegetable product has a popular appeal as it is cheap; hence the increasing imports of vegetable ghee. Building materials seem to have been imported in larger quantities in all municipalities presumably to meet the needs of post-war house building activities. Cotton, cotton seeds, piecegoods, oil and oilseeds also figure prominently in all municipal returns which supports the conclusion that cotton and oilseeds are the important agricultural products and textile and oilcrushing industries are the important industries in Surat district. Medicines, toilet goods , sugar, tea and tobacco are other important articles, the imports of which have uniformly risen in all municipal towns.

An attempt has been made in preceding pages to give a rough idea of volume of trade based on octroi returns of town municipalities. Next comes the wholesale and retail trade carried on in Surat district. There is not a single official or non-official publication giving data on the subject covering the whole field. An attempt was however made to gether information about the trade in some of the important items and the following account is based on that information.

I. SURAT

TABLE No 14.

STATEMENT SHOWING IMPORTS AND EXPORTS BASED ON OCTROI RETURNS 1951-52

Commodity group.		1937-38		1943-44		1951-52		1952-53		1953-54	
		Quantity in Mds.	Value in Rupees.	Quantity in Mds.	Value in Rupees.	Quantity in Mds.	Value in Rupees.	Quantity in Mds.	Value in Rupees.	Quantity in Mds.	Value in Rupees.
1	2	3	4	5	6	7	8	9	10	11	12
1. Ghee, Butter, Cream, Mava etc....	Imports Exports	30,207 5,176		12,389 1,641		15,801 565		16,920 1,197		14,817 595	
2. Sugar, Refined and Unrefined	Imports Exports	1,82,085 92,386		1,38,286 50,173		1,43,946 39,947		2,22,170 73,890		2,58,387 1,18,340	
3. Grain and flour...	Imports Exports	12,31,968 2,89,392		10,96,752 3,03,680		16,60,752 5,34,624		16,47,904 6,65,616		17,05,984 4,38,032	
4. Groceries	Imports Exports					1,44,821 4,1770		1,34,697 48,384		1,29,163 40,714	
5. Dry fruits and Betelnuts	Imports Exports					12,658 960		12,380 2,052		12,147 1,515	
6. Tea, Coffee, Cocoa	Imports Exports					50,086 37,643		66,795 49,632		61,647 52,367	
7. Vegetable products	Imports Exports					22,616 5,252		29,100 7,731		30,100 9,397	
8. Coal, Coke and Charcoal	Imports Export					7,41,376 53,440		8,63,008 1,23,840		6,25,884 71,148	
9. Firewood	Imports Exports	58,976		59,69,160		9,36,992		8,68,896 7,392		8,78,304 32	
10. Kerosene, Petrol	Imports Exports					2,34,304 82,124		2,25,484 68,768		2,34,052 92,072	
11. Oilseeds	Imports Exports					2,27,104 62,672		3,86,688 1,81,856		9,25,552 3,92,464	
12. Oils and Lubricants	Imports Exports					1,15,829 23,115		1,43,547 33,424		1,15,573 35,912	
13. Colours, Paints etc.	Imports Exports						14,65,920 74,244		15,27,520 1,20,992		17,79,668 1,69,920

1. SURAT (contd)

TABLE No. 14 (*contd.*)

1	2	1937-38 Quantity in Mds 3	1937-38 Value in Rs 4	1943-44 Quantity in Mds. 5	1943-44 Value in Rs 6	1951-52 Quantity in Mds. 7	1951-52 Value in Rs 8	1952-53 Quantity in Mds. 9	1952-53 Value in Rs. 10	1953-54 Quantity in Mds 11	1953-54 Value in Rs. 12
14. All kinds of furniture	Imports						1,47,669		1,16,458		1,57,312
	Exports						19,179		18,794		26,603
15. Crude oil	Imports					2,55,612		2,07,452			1,14,464
	Exports					41,600		37,828			1,456
16. Oil man's store and Provisions	Imports					6,254		5,196		4,886	
	Exports					1,183		739		467	
17. Electrical Accessories	Imports						16,90,656		29,02,528		18,66,176
	Exports						48,288		85,152		1,39,432
18. Radio sets and Accessories	Imports						1,99,104		65,504		1,29,088
	Exports						6,720		9,184		36,096
19. Motor and Accessories including tubes & tyres	Imports						9,85,280		5,99,125		7,98,954
	Exports						5,47,819		4,56,000		4,95,754
20. Rubber and Rubber goods	Imports						7,51,568		2,89,888		6,16,512
	Exports						25,232		25,024		52 864
21. Fireworks	Imports						1,27 893		1,65,269		1,91,275
	Exports						20,117		75,563		1,28,765
22. Fancy goods	Imports						72,928		53,920		50,048
	Exports						—		704		1,120
23. Washing soaps	Imports					10,622		10,936		12,291	
	Exports					3,849		4,548		6,760	
24. Umbrella and Spare parts	Imports						3,21,088		1,65,664		2,17,888
	Exports						1,78,656		62,208		1,55,040
25. Stones	Imports						3,20,864		2,90,656		3,15,136
	Exports						38,304		34,176		24,352
26. Cement and Articles	Imports						13,93,792		15,31,232		13,67,104
	Exports						6,94,624		6,84,356		4,64,320
27. Iron and steel	Imports						92,15,168		69,01,824		60,72,256
	Exports						30,36,416		30,66,944		19,47,008

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Trade.

VOLUME OF TRADE

28	Timber, teakwood and all sorts of wood	Imports Exports	5,11,824 16,683		4,96,128 89,834		12 99,989 1 50,890		9,52,549 1,06,496		
29.	Manglore tiles	Imports Exports				Nos. Nos.	11,18,000 84,000	5,87,333 58,666	..	6,93,300 1,33,333	8,98,475 1,56,757
30.	Flooring tiles etc.	Imports Exports				22,767 5,500		24,295 13,416		23,366 11,325	
31.	Tobacco, Gadakoo and country bidis .	Imports Exports				22,767 5,500		24,295 13,416		23,366 11,825	
32.	Chiroots and cigarettes	Imports Exports					10,29,552 16,368		10,34,016 19,056		9,41,376 37,248
33.	All metals except Gold and silver and alloys and sheets.	Imports Exports					17,18,272 11,520		15,07,616 56,864		17,38,624 69,280
34.	Cloth and clothes	Imports Exports	32,15,860 11,93,660		85,77,160 40,28,240		178,42,400 94,48,840		134,78,440 68,95,240		139,67,800 56,77,080
35.	Leather and Plastic articles	Imports Exports					10,32,320 77,440		8,12,000 48,416		9,27,264 59,424
36.	Yarn	Imports Exports					725,66,496 90,60,480		526,66,848 49,56,768		559,47,936 65,95,680
37.	Threads of all kinds	Imports Exports					16,06,688 5,61,536		10,99,264 1,64,640		9,77,088 1,30,816
38.	Gur	Imports Exports				2,06,506 77,959		1,88,681 86,700		1,28,912 92,112	
39.	Glass and Glassware	Imports Exports					7,85,728 32,896		5,89,824 35,776		6,36,800 64,832
40.	All printed matters	Imports Exports					1,27,120 2,120		2,11,800 12,440		2,32,080 6,040
41.	Medicines-Medicinal and Surgical requisites and Chemicals.	Imports Exports					27,21,600 1,85,216		26,24,320 2,74,816		38,21,888 54,54,080
42.	Writing Pads, Card board, Sand papers etc...	Imports Exports					17,42,720 1,98,360		17,88,400 3,01,600		18,66,000 3,63,680
43.	Perfumary and Essences	Imports Exports					4,47,488 87,616		3,36,682 1,00,330		3,78,795 1,02,059
44.	Hosiery	Imports Exports					2,81,184 44,832		2,44,800 36,288		2,90,560 22,4 96

CHAPTER 8.
Trade.
VOLUME OF TRADE

1 SURAT (contd)

TABLE No. 14 (contd.)

1	2	1937-38 Quantity in Mds. 3	1937-38 Value in Rs 4	1943-44 Quantity in Mds. 5	1943-44 Value in Rs 6	1951-52 Quantity in Mds. 7	1951-52 Value in Rs. 8	1953-53 Quantity in Mds. 9	1953-53 Value in Rs. 10	1953-54 Quantity in Mds. 11	1953-54 Value in Rs. 12
45. Wines, Spirit and Beer	Imports						2,06,208		1,16,437		91,755
	Exports						11,371		5,312		4,416
46. Haberdashery	Imports						3,41,664		2,55,488		3,30,464
	Exports						2,368		7,555		20,896
47. Ice	Imports										
	Exports										
48. Meat	Imports					18,432		12,672		12,656	
	Exports					5,776		3,120		5,056	
49. Chunam	Imports										
	Exports										

STATEMENT SHOWING IMPORTS AND EXPORTS DURING 1954-55 BASED ON OCTROI RETURNS (QUANTITY IN BENGALI MDS. AND VALUE IN RS.)

Sr. No.	Commodity group.	Quantity in Mds.		Value in Rs.
1.	Ghee, Butter, Cream, Mava.	Imports	17,964	—
		Exports	828	—
2.	Sugar-Refined and unrefined	Imports	2,85,445	—
		Exports	1,43,297	—
3.	Grain and flour	Imports	19,78,608	—
		Exports	7,51,552	—
4.	Groceries	Imports	1,52,966	—
		Exports	40,449	—
5.	Dry fruits and Betelnuts	Imports	12,755	—
		Exports	1,904	—
6.	Tea, Coffee and Cocoa	Imports	60,841	—
		Exports	55,513	—
7.	Vegetable Products	Imports	27,739	—
		Exports	11,256	—
8.	Coal, Coak and Charcoal	Imports	7,22,484	—
		Exports	80,388	—
9.	Fire Wood	Imports	9,07,648	—
		Exports	—	—
10.	Kerosene	Imports	1,43,330	—
		Exports	50,519	—
	Petrol	Imports	98,831	—
		Exports	27,157	—
11.	Oilseeds	Imports	4,29,584	—
		Exports	2,15,296	—
12.	Oils & Lubricants	Imports	1,14,875	—
		Exports	40,827	—
13.	Colours, Paints etc.	Imports	—	16,90,592
		Exports	—	1,72,224
14.	All kinds of furniture	Imports	—	1,64,971
		Exports	—	32,789
15.	Crude oil	Imports	1,16,312	—
		Exports	39,844	—
16.	Oilman's Store and Provisions ...	Imports	4,417	—
		Exports	703	—
17.	Electrical accessories	Imports	—	18,83,264
		Exports	—	1,00,352
18.	Radio Sets and accessories	Imports	—	2,26,816
		Exports	—	50,880
19.	Motors and Motor accessories including tubes and tyres.	Imports	—	16,94,912
		Exports	—	12,17,152
19.A	Rubber and Rubber Goods	Imports	—	7,28,320
		Exports	—	1,20,640
20.	Fireworks	Imports	—	1,86,624
		Exports	—	1,73,461
21.	Fancy Goods	Imports	—	53,280
		Exports	—	1,248
22.	Washing Soaps	Imports	11,805	—
		Exports	6,933	—
23.	Umbrellas and Spareparts	Imports	—	5,48,672
		Exports	—	3,19,872
24.	Stones, Metals etc.	Imports	—	4,12,672
		Exports	—	30,048
25.	Cement and its materials	Imports	—	14,66,112
		Exports	—	5,15,808
26.	Iron and steel	Imports	—	75,94,048
		Exports	—	15,21,856
27.	Timber, Teakwood and all sorts of wood (except fire wood)	Imports	—	12,24,277
		Exports	—	1,63,243
28.	Manglore tiles (Numbers)	Imports	13,67,333	—
		Exports	2,00,000	—

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Sr. No.	Commodity Group.	Quantity in Mds.		Value in Rs.
29.	Flooring tiles etc.	Imports	—	1,88,064
		Exports	—	1,24,608
30.	Tobacco, Gadakoo and country Bidies (B. Mds.)	Imports	20,854	—
		Exports	10,550	—
31.	Chiroots and Cigarettes	Imports	—	10,33,824
		Exports	—	30,288
32.	All metals except Gold and Silver and alloys and sheets etc.	Imports	—	20,55,939
		Exports	—	1,25,912
33.	Cloth, Clothes, including hosiery ..	Imports	—	1,61,15,488
		Exports	—	67,42,144
34.	Leather Plastic and their articles ...	Imports	—	10,98,720
		Exports	—	62,016
35.	Yarns	Imports	—	6,67,97,664
		Exports	—	67,71,648

TABLE No, 15

2 NAVSARI

STATEMENT SHOWING IMPORTS BASED ON OCTROI RETURNS

Commodity group.		1951-52		1952-53		1953-54		1954-55		1955-56	
		Quantity in Mds	Value in Rs.	Quantity in Mds.	Value in Rs.	Quantity in Mds.	Value in Rs.	Quantity in Mds.	Value in Rs	Quantity in Mds.	Value in Rs.
1		2	3	4	5	6	7	8	9	10	11
1. Cereals		2,13,261		54,656		67,235		89,632			
2. Sugar	[illegible]	1,960		31,971		49,812		4,893			
3. Firewood	Imports	1,62,150		1,33,376		2,06,520		1,12,788			
4. Charcoal	Imports	48,480		27,382 (tons)		31,064 (tons)		27,946 (tons)			
5. Petrol (Gallons)	Imports	3,02,930		2,90,000		1,86,161		1,93,750			
6. Cement	Imports	[illegible]			2,43,200		2,24,042				
7. Timber	Imports	5,250			9,12,000		8,67,800		20,80,636		
8. Bricks	Imports	3,018			17,04,000 Nos		13,39,100 Nos				
9. Colours and Paints	Imports	7,809			12,41,600		17,95,800				
10. Stone	Imports	83,450			1,15,200		1,40,256				
11. Tea	Imports	3,888			6,04,800		63,41,000		7,19,920		
12. Tabacco	Imports	1,832		2,748		2,869		2,372			
13. Piecegoods and cloth	Imports	5,420			22,36,400		25,96,000		25,87,400		
14. Iron, Copper, Brass etc.	Imports	18,126			14,01,600		31,35,580		3,58,402		
15. Kerosene (Gallons)	Imports	1,76,196		1,56,064		1,70,226		1,70,426			
16. Ghee-Pure and vegetable	Imports	5,017		6,052		5,754		6,782			
17. Groceries	Imports	24 643			12,03,200		12,34,650		16,30,900		
18. Sweet oil	Imports	14,150		18,800		16,474		20,090			
19. Cuttlery	Imports	4,900		2,01,600			20,580		37,412		
20. Crude oil	Imports	2,91,816		2,22,000		2,47,695		94,484			
21. Medicines	Imports	4,800			9,40,800		14,31,600		19,72,672		
22. Stationery	Imports	4,150			3,36,000		5,21,400		6,58,500		
23. Cotton	Imports			48,960		69,038		60,304			
24. Soaps	Imports	2,100			3,45,000		3,65,050		3,45,000		

TABLE No. 16.

STATEMENT SHOWING IMPORTS BASED ON OCTROI RETURNS

3. BULSAR.

Commodity group.		1951-52		1952-53		1953-54		1954-55		1955-56	
		Quantity in Mds.	Value in Rs.	Quantity in Mds.	Value in Rs.	Quantity in Mds.	Value in Rs.	Quantity in Mds.	Value in Rs	Quantity in Mds.	Value in Rs.
1		2	3	4	5	6	7	8	9	10	11
1. Sugar	Imports					38,381		47,104		84,027	
2. Preparation of Sugar	Imports						78,499		57,616		59,926
3. Cotton seeds	Imports					14,981		11,057		9,393	
4. Groundnuts with shells	Imports					17,280		92,676		49,640	
5. Seeds of Groundnuts	Imports					48,432		59,779		40,321	
6. Oil of groundnuts	Imports					31,385		16,066		13,750	
7. Rice, Wheat, Jowar etc.	Imports					1,69,988		1,28,401		1,72,038	
8. Nagli, Jav, Maize	Imports					10,421		46,680		26,710	
9. Mug, Gram, Valana (*Kathol*)	Imports					1,93,944		2,77,920		2,27,413	
10. Dals of Mag, Gram etc. (*kathol Dal*)	Imports					13,991		23,639		24,698	
11. Menda, Rava, Basen	Imports					5,066		8,312		11,910	
12. Flour of grain of any kind	Imports					901		751		745	
13. Paddy	Imports					5,145		3,779		7,126	
14. Jaggery	Imports					1,19,894		1,78,257		1,64,736	
15. Dry chillies and Powder	Imports						9,35,491		7,71,878		9,56,263
16. Ghee	Imports					2,206		1,602		1,594	
17. Vegetable Ghee	Imports					5,017		5,249		5,253	

18. Fish ...	Imports			15,316		10,313		11,734	
19. Charcoal, Coke and Coal ...	Imports			2,13,539		2,36,182		3,22,676	
20. Firewood ...	Imports			1,93,159		4,02,907		6,26,932	
21. Kerosene, Petrol etc. (Gallons) ...	Imports			4,49,141		5,69,859		6,15,877	
22. Soap (washing) ...	Imports			4,553		5,152		5,070	
23. Soap (Toilet) ...	Imports			210		184		235	
24. Soda khar ...	Imports			1,126		2,721		8,300	
25. Country stones ...	Imports			1,912		2,300		1,252	
26. Tiles ...	Imports			121		134		93	
27. Bamboos ...	Imports				93,044		54,934		77,656
28. Wooden doors etc. ...	Imports			2,625		2,303		3,073	
29. Country teak etc. ...	Imports			4,19,617		3,45,795		3,60,772	
30. Colours, Paints etc. ...	Imports				97,638		1,23,078		3,12,525
31. Manglore tiles (in numbers) ...	Imports			6,29,900		10,80,100		6,82,375	
32. Country tiles (in numbers) ...	Imports			38,500		44,600		1,35,000	
33. Cement and articles made of cement ..	Imports				4,51,659		6,10,535		1,93,287
34. Chunam ...	Imports			10,824		12,848		4,465	
35. Bricks (in numbers) ...	Imports			75,95,300		47,70,500		37,21,265	
36. *Damar* and Kill ...	Imports				22,507		4,389		6,473
37. Medicines ...	Imports				90,259		3,16,299		7,99,210
38. Tea, Coffee, Cocoa ...	Imports				6,00,999		5,88,799		6,28,680
39. *Jerdalu, Anjir, Akhrot* (Dry fruits) ...	Imports				28,978		27,508		27,700
40. Oil of Sukhad etc. ...	Imports				38,658		40,509		41,156
41. Iron Steel etc. ...	Imports				9,35,764		7,16,956		7,43,319
42. Zink ...	Imports				1,296		3,316		8,307

CHAPTER 8. Trade.

VOLUME OF TRADE

TABLE No. 16 (Contd.)

3. BULSAR—(*contd.*)

Commodity group.		1951-52		1952-53		1953-54		1954-55		1955-56	
		Quantity in Mds.	Value in Rs.	Quantity in Mds.	Value in Rs.	Quantity in Mds.	Value in Rs.	Quantity in Mds.	Value in Rs.	Quantity in Mds.	Value in Rs.
1		2	3	4	5	6	7	8	9	10	11
43. Lead and Articles made of them	Imports						2,759		3,503		9,574
44. Copper, Brass etc.	Imports						2,72,228		2,71,229		2,03,670
45. Cloth of each kind	Imports						21,82,978		16,74,969		19,86,193
46. Cotton and Woollen Hosiery	Imports						32,936		18,293		35,604
47. Cotton Yarn	Imports					4,356		3,113		3,532	
48. Ropes and threads	Imports						6,08,548		5,03,827		4,66,493
49. Cotton	Imports					713		256		656	
50. Tobacco and Articles	Imports					5,624		5,312		8,804	
51. Crude oil	Imports					3,04,704		3,24,686		3,64,583	
52. Glassware	Imports						1,25,785		95,817		1,39,524
53. Stationery	Imports						98,577		1,04,056		1,29,078
54. Cycle and Motor Cycle	Imports						53,909		31,547		32,640
55. Motor, lorries, Buses	Imports						40,012		9,10,073		2,56,000
56. Electric Motor etc.	Imports						4,66,228		4,61,420		5,95,226
57. Corrugated iron sheets	Imports						89,076		1,15,376		89,328
58. Leather of any kind	Imports						80,024		75,579		81,403
59. Umbrella	Imports						20,601		12,454		17,988
60. Gramophone	Imports						83,104		65,853		76,229
61. Polished Paper	Imports						1,124		1,989		2,015

TABLE No. 17

4. BILIMORA

STATEMENT SHOWING IMPORTS BASED ON OCTROI RETURNS

Commodity Group	1951-52		1952-53		1953-54		1954-55	
	Quantity in Mds.	Value in Rs.	Quantity in Mds.	Value in Rs.	Quantity in Mds.	Value in Rs.	Quantity in Mds.	Value in Rs.
1	2	3	4	5	6	7	8	9
1. Grain	41,725		1,13,302		1,68,699		2,12,840	
2. Sugar	8,530		19,547		13,164		23,772	
3. Ghee	345		249		291		310	
4. Tea and Coffee		3,15,467		3,05,242		2,47,228		3,30,934
5. Fish	11,252		9,312		11,112		9,606	
6. Gur	21,491		15,504		8,130		6,700	
7. Vegetable Ghee	2,279		2,718		1,237		1,745	
8. Kathol (Pulses)	65,798		65,472		—		—	
9. Dals (Pulses)	6,787		8,153		—		—	
10. Kanda-Batata	22,222		29,805		19,120		24,728	
11. Menda Rava	2,998		4,471		5,128		7,744	
12. Groceries		6,86,400		5,29,730		4,35,776		5,11,714
13. Sweetmeats		8,284		2,526		1,152		5,501
14. Provisions		46,106		35,856		23,424		25,492
15. Tamarind	1,936		2,230		902		1,763	
16. Oils	12,632		14,532		9,329		11,600	
17. Charcoal	11,883		12,135		13,010		14,314	
18. Washing Soda	3,398		2,018		849		1,260	
19. Safety Matches (in Gross) ...	10,132		12,035		9,392		12,006	
20. Coal, Coak and Hard Coak (in tons)	241		203 174		276		797	
21. Firewood (in cartload) ...	12,523		Wagons Carts 8,960		11,532		16,339	
22. Fuel oil (in Gallons) ...	2,765		02		1,640		3,586	
23. Petrol	1,17,056		1,25,280		72,112		73,455	
24. Oil Seeds		49,41,729		53,70,220		31,41,888		37,74,536

TABLE No 17 *(Contd.)*

1	2	3	4	5	6	7	8	9
25. Washing Soap		1,13,875		1,47,643		95,808		1,01,595
26. Quicklime stones etc. ...		25,778		14,839		11,926		16,242
27. Bamboos and articles thereof		46,509		21,061		19,035		23,505
28. Timber		16,84,912		19,60,128		11,17,231		11,73,696
29. Paints and oils ...		1,09,368		1,02,515		1,03,936		1,11,768
30. Compressed Wood, Plywood etc.		4,677		4,118		3,388		4,207
31. All kinds of stones and articles thereof		3[illegible],688		18,745		56,837		47,895
32. All kinds of strings and ropes		18,601		5,160		82,224		95,652
33. Tiles		2,303		77		8,113		210
34. Sands (Brass)	1,140		2,585					
35. Manglori tiles (in numbers)	1,06,875		1,44,000		1,78,000		1,62,300	
36. Bricks...	1,36,000 (number)		135 (carts)		3,68,075 (number)		49,500 (number)	
37. Cement		9,996		6,757				
38. Drugs and Medicines ...		19,763		1,50,830		1,22,315		1,56,806
39. Toilets and other requisites		35,977		23,076				
40. Mineral oils (Gallons) ...	4,09,580		4,16,784		1,30,016		2,86,662	
41. Tobacco	1,566		1,655		1,885		2,246	
42. Bidi		43,119		43,756		50,659		40,834
43. Cigarettes		51,045		82,306		85,931		1,13,796
44. Piecegoods		6,48,382		8,00,509		20,22,632		..
45. Miscellaneous articles ...		7,46,091	6,53,524					
46. Pasti papers	1,846		1,303		1,176		1,363	
47. Cotton (with seeds) ...	20,796		23,808		12,155		31,020	
48. Cotton waste	552		269		376		380	
49. Iron and machinery parts ...		2,47,420		6,41,061		6,21,632		4,42,899
50. Sheets except corrugated sheets		6,04,343		2,09,529		2,42,883		2,98,562
51. Electric Machinery		3,283		2,850		20,960		23,282
52. Motor and Motor parts ...		67,305		70,604		52,864		1,12,820
53. Mechanical vehicles ...		33,768		37,271		40,547		27,051

TABLE No 18.

RANDER.

STATEMENT SHOWING IMPORTS BASED ON OCTROI RETURNS.

Commodity group	1951-52		1952-53		1953-54		1954-55		1955-56	
	Quantity in Mds.	Value in Rs.	Quantity in Mds.	Value in Rs.	Quantity in Mds.	Value in Rs.	Quantity in Mds.	Value in Rs.	Quantity in Mds.	Value in Rs.
1	2	3	4	5	6	7	8	9	10	11
1. Sugar		1,99,150		1,83,650						
2. Cattle goods		48,768		38,144						
3. Firewood		88,000		76,160						
4. Charcoal		55,885		44,286						
5. Cement		8,128		22,688						
6. Building material		51,051		33,001						
7. Tea		82,752		72,320						
8. Tobacco...		54,400		60,800						
9. Iron, Copper, Brass etc.		17,216		23,296						
10. Kerosene		57,760		52,080						

CHAPTER 8.

Trade

VOLUME OF TRADE

TABLE No. 19

STATEMENT SHOWING IMPORTS BASED ON OCTROI RETURNS.

GANDEVI :

Commodity Group	1951-52		1952-53		1953-54	
	Quantity in Mds.	Value in Rs.	Quantity in Mds.	Value in Rs.	Quantity in Mds.	Value Rs.
1. Grains and Cereals	14,263		64,650		68,604	
2. Sugar	6,231		4,340		6,974	
3. Firewood (Carts)	1,606		2,204		2,255	
4. Charcoal (Bags)	4,250		7,221		7,474	
5. Petrol (Gallons)	4,831		7,750		18	
6. Cement (Bags)	1,035		1,383		1,357	
7. Building material (carts)	441		341		339	
8. Tea	1,151		657		593	
9. Tobacco	89		1,037		898	
10. Piecegoods	15,380		5,481		6,890	
11. Iron, Copper, Brass, etc.	3,396		7,212		2,078	
12. Kerosene	7,012		6,501		4,936	

CHAPTER 8.
Trade.

COTTON ZONE.

Cotton trade in Surat district.—For the purpose of cotton statistics, Surat district is said to comprise (*i*) the whole of Surat district (*ii*) Ankleshwar taluka of Broach district and the former Rajpipla state (now merged in Broach district) and (*iii*) Navapur taluka of West Khandesh district.

Average Production.

The yearly output of cotton (average of last 10 years from 1952/53 back to 1943/44) in the Surat district as described above is 1,14,121 bales. The total number of bales (average of last ten years) pressed in the district, are as follows:—

1.	Surat district	77,235 bales.
2.	Ankleshwar/Rajpipla	32,866 bales
3.	Navapur taluka	4,020 bales
		1,14,121 bales.

Figures of pressings in each district during 1943-44 to 1952-53 are given below:—

STATEMENT SHOWING THE NUMBER BALES PRESSED IN SURAT DISTRICT DURING 1943-44 TO 1952-53

Year.	Political Divisions		Navapur	Total.
	Surat.	Ankleshwar/ Rajpipla		
1943/44	1,54,223	64,531	8,257	2,27,011
1944/45	41,406	24,893	1,485	67,784
1945/46	59,151	28,993	3,048	91,192
1946/47	70,403	22,766	3,495	96,664
1947/48	85,019	33,886	3,925	1,22,830
1948/49	43,608	25,092	3,873	72,573
1949/50	78,730	38,762	3,508	1,21,000
1950/51	85,395	80,892	4,517	1,20,804
1951/52	69,460	20,810	3,785	94,055
1952/53	84,955	38,037	4,309	1,27,301
Total ...	7,72,350	3,28,662	40,202	11,41,214

CHAPTER 8.

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COTTON ZONE.

STATEMENT SHOWING THE YEARLY OFF TAKE OF SURAT COTTON BY INDIAN MILLS

No.	Name of Mill Centres.	Average yearly consumtion. (in bls. of 400) Bls.	Percentage of total average crop of last 10 years.
1.	Bombay Centre	42,000	37 %
2.	Ahmedabad Mills	43,000	37 %
3.	Kanpur Mills	10,300	9 %
4.	Southern Mills	2,000	2 %
5.	Kathiawar Mills	1,000	6 %
6.	Delhi Mills	4,500	4 %
7.	Calcutta Mills	600	1/2 %
8.	Khandesh Mills	2,500	2 %
9.	Local Mills	2,200	2 %
	Total	1,14,100	100%

Surati cotton which is considered to be the best in India, is comparable only to 'Lakshmi' and 'Punjab' cotton. It has a staple length 14/16 to 15/16 counts. It is also better in style and class and is preferred by those mills which produce cloth of higher counts.

Export destin- tions.

Surat district produces staple varieties of cotton the export of which to countries outside India is banned. The whole of Surati cotton is therefore consumed by Indian Mills, the most prominent being those in Bombay and Ahmedabad. Normally, as could be seen from the figures of offtake given below, the textile mills at these two centres together consume almost 80 per cent of the year's cotton crop. Out of the balance of 20 per cent crop, about 5 per cent is consumed by the mills in Saurashtra and about 10 per cent is taken up by the mills in Kanpur. The rest of the quantity in a more or less equal proportion,is consumed by southern mills, Delhi mills, Calcutta mills and Khandesh mills. Local mills (mills in Surat district) do not seem to consume more than 2,000 lbs. a year.

Marketing Organisation: (a) Co-operative Societies.

Surat district has made much headway in developing co-operative institutions for marketing of cotton. At the apex is the Dakshina Gujarat Co-operative Cotton Marketing Union Ltd. At the base are co-operative cotton sale societies of groups of villages. There are about 48 such Co-operative Cotton Sale Societies and eight ginning and pressing societies in the district. The Dakshina Gujarat Co-operative Cotton Marketing Union is a connecting link between Co-operative cotton sale societies and commission agents. Hence the 'deal' is always made by societies and the commission agents through the advice of the Union. The selection of cotton, weighment and payment is

to be done on the same day. The 'selection lot'* can be rejected but the deal cannot be rejected. Any dispute arising from such transaction can be settled by arbitration through the Surat District Cotton Dealers Association.* This institution is of Mahajan type which has no legal power but possesses it *de facto* by general practice and custom.

(b) Private Agencies.

Privately owned ginning and pressing factories are another important agency engaged in the marketing of cotton. There are about 30 such factories in Surat district. Out of these some are given over to commission agents in Bombay on rental basis. The private owner remains there but he acts as an agent of company. There are two or three such gins but they handle some 25,000 bales. They do not come in the market but they export cotton directly to mills owned by them. All such private agencies compete for growers' *kapas* which is usually bought by village kapas brokers who usually move from village to village. The farmers give delivery during a specific period of time. Purchasing is done by dalals on the basis of current market prices. Sometimes advance money is also paid to regular sellers or farmers with whom such private concerns have long contacts.

(c) Commission Agents.

The commission agents who represent big cotton traders of Bombay and Ahmedabad play a pivotal role in the cotton marketing organisation. They have to work according to the instruction of these big cotton traders. The commission agents then instruct their dalals who contact sellers of Surati cotton. The quality of cotton determines the price. The commission amount to Rs. 0-8-0 to be paid to dalals is borne by cotton merchants of Bombay. The cotton merchants in their turn transact business with various mills. They request their upcountry commission agents to store cotton upto the time of delivery and pay all charges for that purpose, such as interest, godown rent, etc.

Though at present there seems to be a sort of co-existence between co-operative institutions and independent merchants, the pace of development of co-operative institutions in cotton trade indicates that farmers are nowadays giving increasing preference to co-operative institutions. Commission agents also give preference to co-operative societies because the latter can be relied upon to supply unadulterated standardised cotton.

Regulated Market

No regulated market in cotton has been established in Surat. However much useful work is done by co-operative institutions and the percentage of malpractices is much less where such instit-

* "Selection Lot" means bales of cotton of particular quality upon the basis of which 'deal' is made. The commission agent can reject particular group of cotton bales if the quality is inferior than what is agreed upon.

*The Surat District Cotton Dealers Association is an organisation of persons engaged in the marketing of cotton in Surat District. Hence all types of co-operatives dealing in cotton, private gin owners, commission agents etc., are members of this organisation.

CHAPTER 8.

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COTTON ZONE

utions are developed. The areas of Dediapada, Rajpipla, Mangrol and Mandvi represent backward tracts of Surat cotton zone and a regulated market in cotton seem to be very desirable for them. Co-operative institutions can also go a long way in safeguarding the interest of the producer.

Customary charges.

In Surat district, cotton generally termed as 'Surati' is sold. Every deal made by the buyer or by the seller is a *pacca* deal ; the seller is bound to give delivery and buyer is bound to take it. Rates are quoted in terms of candy. In Surat 800 lbs. of cotton make one candy while at all other places in India it is made of 784 lbs. of cotton. The rates quoted are of factory compound delivery.

Over and above the calculated price, the buyer has to pay to the seller or to the ginning factory over charges for the cotton he has bought. This charge is borne by the commission agent on account of the mills. After the 21st June no pressing charges are given by the buyer to the seller. They are borne by the seller but the rates quoted include pressing charges. The deals are made on samples of actual lot. But the buyer has a right to reject the lot. Generally he has to approve the lot within four days and to take delivery within 20 days. If there is no booking facility upto 20 days, he has to weigh the bales and give money to the seller. Over and above the normal charges enumerated above, the seller has to give to the buyer a charge at the rate of annas eleven per bale for transport of the goods upto the station.

The main customary charges levied per candy of 800 lbs. of cotton are as follows :—

1.	Brokerage per candy	Rs.	1—0—0
2.	Tolat (weighing) per candy	Rs.	0—5—6
3.	Chhapmar per candy	Rs.	0—2—3
4.	Sikamar (stamping) per candy	Rs.	0—2—3
5.	Charity per candy	Rs.	0—2—0

In Surat district the seller of cotton has to bear the above market charges whereas elsewhere they are usually borne by the buyers of cotton. However, payment for services rendered is not directly made by the seller. From the amount that is due to him by the buyer by way of price of the commodity sold, the buyer deducts the amount of service charges and himself makes payment to the parties concerned, thus keeping his hold over them.

The normal duration of trading activity varies with climate. There are two tracts in Surat district, one beyond north of Tapi river while another beyond south of Tapi river extending upto Damanganga and West Khandesh district.

The crop comes up earlier by 15 days in the tract situated north of Tapi river. If there are no rains at the time of Diwali throughout the whole tract, the crop comes up earlier than expected. Roughly there are two normal periods of trading: January to May and February to May. Forward cotton deals are possible one or two months ahead of season. i. e. from November to December or from December to January. It is desirable that market should function from January to May so that all cotton can be easily marketed and if that is not possible the surplus could be exported in time to countries outside India.

Storage charges.

For the storage of cotton, godown accommodation is easily available. During the course of the season cotton stocks, both full pressed and loose cotton, are usually stocked in the open in the factory compounds but due to the consequent long exposure to the sun, it suffers in weight. Fully pressed cotton which remains unsold until the onset of the monsoon, is usually stocked in factory godowns for later disposal. Here it gains in weight due to moist weather, and thus some of the loss sustained previously due to exposure to the sun is made up. Some cooperative societies have good godowns having 5,000 bales capacity. Storage charges during May to Diwali are Rs. 1-0-0 per bale for the season and the same for one cartload of cotton seed (28 Surati maunds.)

Trade Routes

Rail route is the cheapest route for the despatch of cotton from Surat district to outside destinations. Although Surat is a port and despatches by sea in country crafts to Bombay and other coastal ports are possible such despatches work out considerably dearer as compared to those by rail. The cost of insurance in the case of sea-route makes such despatches prohibitive. Cotton is therefore exclusively despatched by rail. Scarcity of wagons practically every season in recent years, resulted in the accumulation of cotton stocks at producing centres and on certain occasions it had its repercussions on the prices of cotton upcountry.

Price fluctuations

During pre-war time, prices realised by cultivators were more or less satisfactory. Since the cotton produced in Surat district, owing to its quality is much in demand by mills, it always fetches good price which are definitely better than those of food crops. The quality of production tends to depend mainly upon favourable climate rather than upon price support because the latter is more or less assumed. During the last decade cotton prices in 1943-44 season were perhaps at the lowest whereas during 1948-49 and 1949-50 due to growing scarcity of cotton arising from the partition of the country and the diversion of considerable areas from cotton crop to food crops, they had reached peak levels. The following figures will speak of the average price of cotton for each season for the last 10 years.

CHAPTER 8.

COTTON ZONE Trade

Season.	Price.
	Rs.
1943/44	575
1944/45	600
1945/46	600
1946/47	560
1947/48	577
1948/49	810
1949/50	960
1950/51	1,025
1951/52	890
1952/53	890

Cotton trade and Government Legislation

The Grow More Food campaign was sntroduced in 1944-45 which niverted vast cotton lands to food crops. Owing to such devrsion, production of cotton fell considerably with the result that both in repsect of food and cotton, India's dependence on foreign countries went on inceasing. With the partition of India in 1947, the problem became still more difficult. The growing scareity of cotton affected the production of cloth and prices both of cotton and cloth went up very high At this stage Government's intervention became quite necessary and in order to enact various laws, the most important among which were:

1. Imposition of price controd: Bombay licensing order in 1948/49;
2. Rationing of cotton: Restriction on the moyement of cotton in 1949/50;
3. Introduction of the "Nomince Scheme"-setting up of Cotton Distribution Committees to ensure equitable distribution of cotton to mills, in 1950-51;
4. Division of various cotton dealers into three groups "A", "B" and "C" with a view to libcralising the *nominee scheme* (explained below) in order to remove the last vestige of monopolistic marketing, in 1951-52.

Besides, there was complete stoppage of hedge trading in seasons 1949-50, 1950-51 and 1951-52 in addition to a restriction on early trading in new crop of cotton.

Despite all this legislation meant to check the soaring prices of cotton, the desired purpose was not served and goverdment had finally to envisage a scheme known as the "Nominec Scheme' whereby all supplies of cotton to mills could be made through the government appointed nominecs only This scheme worked very satisfactorily in Broach and Surat districts. According to the nominee scheme, milll that wished to buy cotton against their

quotas had to place a buying order with any one of the nominees appointed by the Textile Commissioner. The nominee, in turn used to register with the distribution committee his demand for cotton for which he had received a buying order from his mill connection and against such demand allocations were made by the distribution committee at a fixed price. If any buyer (in this case the mill) suspected that the cotton supplied to him did not qualify for the price fixed by the distribution committee, he had a right to go in survey (local survey held by the distribution committee), and the difference, if any, according to the result of the survey, was admissible to the buyer concerned. Surveys were open to sellers also who thought that the distribution committee's price for their cotton was lower. The purpose for which such distribution committees were set up was well served, in as much as the rising prices of cotton were well checked and mills were able to get their supplies of cotton at or within ceilings.

PLANTAINS

Plantains have proved to be one of the most important cash crop to Surat agriculturists. Only one variety '*lily chhal*' or '*Lokhandi*' is grown in the district. *lal*, *soneri*, *tapra* and *Basarai* were some of the important varieties grown before, but their cultivation has been abandoned due to economic reasons.

Surat, Bardoli, Vyara, Varachha, Dondaicha, Amalsadt Navsari, Bilimora, Gandevi and Puna-Kumbharia are importan, plantain-growing areas of the district. Surat, Navsari, Amalsad, Gadat, Gandevi and Bardoli are important wholesale trade centres for plantains trade. Surat, Sayan, Navsari, Bilimora-Amalsad and Gandgadhara Bardoli, Timberva are important assembling markets, the former group situated on Western Railway and the latter group on Tapi Valley Railway. Following are the figures of produce assembled in these markets during the years 1949-50 to 1953-54

Markets	*Year*	*Quantity*
		B. mds.
Surat	1949-50	1,98,000
	1950-51	2,77,500
	1951-52	3,32,400
	1952-53	2,70,500
	1953-54	2,65,000
Sayan	1949-50	50,000
	1950-51	60,000
	1951-52	75,000
	1952-53	78,200
	1953-54	76,500
Gangadhara	1949-50	66,075
	1950-51	61,250
	1951-52	1,06,650
	1952-53	1,04,810
	1953-54	1,18,455

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Trade

PLANTAINS

1	2	3
		B. mds.
Bardoli	1949-50	60,625
	1950-51	74,290
	1951-52	140,570
	1952-53	1,22,232
	1953-54	1,51,800
Timberva and Mandvi	1949-50	49,375
	1950-51	23,527
	1951-52	1,06,200
	1952-53	98,250
	1953-54	1,05,000
Navsari	1949-50	25,000
	1950-51	30,000
	1951-52	35,150
	1952-53	49,500
	1953-54	58,015
Bilimora-Amalsad	1949-50	Not available
	1950-51	Do.
	1951-52	84,900
	1952-53	90,840
	1953-54	98,080

The main export markets are Bombay and Ahmedabad. The following table gives a rough account of distribution of export from three important plantains growing tracts :

Distribution of Exports :—

From	To		
Timberva, Bardoli ...	Bombay	Ahmedabad	Other stations
Gangadhara Chalthan ...	60%	30%	10%
	Surat-Bhusaval tract of Western Rly.		
Surat, Utra, Sayan ...	70%	20%	10%
	Bombay-Ahmedabad tract of W. Rly.		
Bilimora-Amalsad ...	95%	5%	--

Sale through Merchants

Except in the case of Surat market, most of the produce is sold through co-operative societies, though a few petty merchants also exist in all important trade centres. Merchants purchase the produce either from a co-operative society or directly from agriculturists. The prevalence of this merchant class inspite of the fact that some 90% of plantains trade is controlled by cooperative societies is due to the credit facilities these merchants grant to agriculturists and to other outside merchants who purchase plantains from them.

Sale through Co-operative Societies

Almost all plantain-growers are members of co-operative societies. The inspectors of the society move in villages and contact the members of the society to register their weekly

quota. The society then arranges for the sale of the produce on the basis of quota registered with it. The merchants contact the society for their purchases. Thus most of the produce is sold at the producing centre, while a little quantity is also sent for sale at Bombay and Ahmedabad at the society's risk. In this case, the deal is to be made through commission agents, the commission to be paid is 3%. When the price is fixed at the producing centres the delivery of the produce is to be given at railway siding yard. The leading charges of the wagon (Rs. 15 per wagon) and railway freight charges are to be borne by purchasers.

During the season the society fixes rates on 1st, 11th and 21st of every month which continue to prevail for ten days succeeding the day on which they are fixed. The merchants make their purchases at these fixed rate.

Though the produce is available throughout the year, the fair season can be considered to extend from July to January while peak-season is from August to November. Following is the table of average prices of plantains for the years 1945 to 1954.

Year.	*Prices.*
	Rs.
1945	9 0 0 B. mds.
1946	8 12 0 "
1947	8 8 0 "
1948	8 6 0 "
1949	8 0 0 "
1950	8 4 9 "
1951	6 15 0 "
1952	6 8 0 "
1953	6 5 6 "
1954	6 4 0 "

Following is the list of cooperative societies dealing in plantains in Surat district:—

1. Sardar Bagayat Sahakari Mandal Ltd., Bardoli.
2. Sayan Group Cooperative Multipurpose Society Ltd., Sayan.
3. Bardoli Khedut Sahakari Mandal Ltd., Bardoli.
4. Amroli Group Cooperative Multipurpose Society Ltd., Amroli.
5. Puna-Kumbharia Group Cooperative Fruit and Vegetables Growers' Society Ltd., Surat.
6. Gadat Vibhag Sahakari Khedut Mandal Ltd., Gadat.
7. Gandevi Khedut Sahakari Sangh Ltd., Gandevi.

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TIMBER TRADE

Surat district has the forest areas of Dharampur and Vyara range and the adjoining Dangs forest.

Among articles of export from the district, timber ranks next in importance to cotton. The old Gazetteer records that the value of timber exported by sea during 1874 was Rs. 4,72,280. The Railway return show that in 1874, 3,336 tons of timber worth Rs. 1,34,590 were exported.

Prior to the construction of Bombay, Baroda Central India Railways (now Western Railway), i.e. before 1860, all forest products were brought to Bulsar port. Hence the name 'Valsadi Sag' (Bulsar teak). Bilimora town is very closely linked with the rich jungles round about, the products of which fetch handsome revenues to Government every year. Keeping in view the importance of the town, the then Baroda state Government constructed a special narrow guage railway line connecting all important jungle areas, upto Bilimora port, to facilitate the export of jungle products from Bilimora port, through country crafts. Thus the products of forest hinterland found good outlets in centres like Vaghai, Dungarda, Kevdi Road and Unai, all lying on the Bilimora-Vaghai tract of G.B.S. Rly. (Western Railway now). Bilimora is considered to be an important port for the export of timber

Bulsar has lost its former importance as an export centre for timber. But still it is the main distribution centre of Dharampur forest area. Some 5,000 tons of Timber worth Rs. 10,00,000 is exported to Bombay, Broach. Saurashtra and Kutch by sea route. All stations on Billimora-Vaghai tract of G.B.S. Rly. (Western Railway now) are most important outlets of forest products. Some 50,000 tons of timber worth Rs. one crore are exported by railways.

Bilimora, Bulsar, Surat, Pardi and Kolak are important trade centres of timber trade in Surat district. The peak season is from October to June but due to scarcity of wagons, trading activity is spread over the whole year. The prices of teak wood generally depend upon straightness and roundness of the wood. They vary between Rs. 5 to Rs. 20 per cft. Teak, ain, seasum, tanach, B.O. khair and haldu are important varieties of timber marketed.

When the forest department was not properly organised the practice was to have a general deal between the department and purchasers, the latter being allowed to cut whatever kind of trees they wanted to cut. Later on forest areas were surveyed and a definite policy was laid down for proper utilisation of forest wealth, as a result of which only limited forest areas were allowed for cutting, the

TIMBER TRADE

interval of time between cutting being so devised that at the time of next cutting that particular area would be ready for second cutting, the aim being to preserve the continuously diminishing forest wealth. This practice which is known as 'Coupe System' is prevalent for the last 30 years.

Forest contractors usually visit in April or May the coupes which are to be cut in a particular year, and after making a rough estimate offer tenders for the purchase of the coupes in July and August when tenders are invited by Forest Department. Cutting actually starts in October and November. Timber is brought to some Railway station or to a port and is arranged kind-wise and size-wise.

Forest contractors, commission agents and purchasers form three agencies through which timber is marketed. The system of Commission agents is different from that in other trades in that in timber trade, apparently a double deal is made, one between the contractors and the commission agents and other between the commission agents and purchasers, and in both cases it is actually done in the name of the commission agents. Thus he has a very great financial responsibility. Both parties i. e. contractors and purchasers have to pay 2 per cent commission each in such transaction. Thus commission agents bring together two parties, and is also obliged to arrange for the export of timber wherever the buyer wants. He charges the additional cost involved in such arrangement. There are about 125 forest contractors and 20 commission agents in Surat district.

Recently the Government has adopted the policy of establishing and encouraging forest labour co-operative societies. The policy of Government with regard to allotment of coupes toforest Labour Co-operatives with the help of social workers is toh andover forest coupes at upset prices and on reasonable terms as part of the comprehensive programme for the all round advancement of Adivasis. The objective underlying this policy is that the Adivasi and other forest labourers should not only get fair wages but also the profits out of coupe contracts and further these co-operative societies should progressively take the place of forest contractors. Recently a new formula has been evolved and profit or loss in the working of coupes is to be shared 50-50 between societies and government.

In Vyara division a thirty year contract for sustained supply of khair tree for manufacture of *kath* by scientific method at Rs.15 per tree has been entered into by government with contractor. The agreement was signed in the year 1953 and at the end of that year the construction of factory building and installation of machinery were under progress.

RETAIL TRADE

Retail trade is carried on by a large number of shops located in various towns and villages of Surat district. Details of shops

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located in rural areas and non-municipal urban areas have been given elsewhere and the following account deals with the municipal towns exclusively.

RETAIL TRADE

Retail shops which provide the link between the consumer and the wholesaler are located in various wards of municipal towns and cater to the needs of their localities. The stock in trade is usually limited but repaid repelnishment is made whenever goods are sold out. Retailers usually have dealings with some wholesaler in the town itself but not infrequently they directly deal with the source of origin of goods. Besides, quite a few retailers have direct dealings with outsider merchants particularly in cloth trade. Retail sales are generally made on cash basis but running accouts of customers are not uncommon.

The Bombay Shops and Establishment Act (LXXIX of 1948 of Government of Bombay) has been enforced in the five towns, Surat, Navsari, Bilimora, Bulsar and Vyara. The Act provides for the compulsory registration of all shops and establishments. Its administration is entrusted to the municipal boroughs. It is however to be noted that the said Act is not appplicable to the following municipalities viz., Rander, Gandevi, Dharampur and Kathor.

The following statement shows the total number of shops and establishments registered as on 31st March 1953. The employment provided by 'Shops' in different municipalities is given in Table No. 20.

Municipalities	Shops.	Commercial Establishments.	Residential Hotels	Restaurants and Eating Houses	Theatres etc.	Total.
Surat ...	6,521	5,43	16	493	9	12,082
Billimora ...	774	84	1	52	3	914
Navsari ...	1,714	164	7	88	3	1,976
Bulsar ...	1,372	99	6	76	4	1,555

TABLE No. 20

STATEMENT SHOWING EMPLOYMENT PROVIDED BY 'SHOP'

Municipalities	Shops	Males	Females	Children	Persons in responsible capacity	Total
Surat ..	6,521	7,465	538	294	390	8,687
Billimora ...	774	975	123	18	...	1,116
Navsari ...	1,714	2,479	113	85	57	2,734
Bulsar ...	1,372	1,840	345	145	...	2,330

Groceries

In retail trade, grocery shops are the most important. They constitute the largest number of shops and also provide the widest employment. There are 467 grocery shops in Surat. 229 in Navsari, 118 in Billimora and 415 in Bulsar. All sorts

of cereals and pulses, gur, sugar, oil, ghee, spices, condiments, tea, coffee and other items of grocery are sold in these shops. Stock in trade of individual shops varies in value by a wide range from Rs. 1,000 to Rs. 50,000. Most of the shops, however, are small having stocks worth only between Rs. 1,000 to Rs. 10,000. Almost all the grocery shops are of fairly long standing. The commodities sold in these shops are brought from wholesalers in Bombay and North Gujarat.

Usually shopkeepers purchase commodities on credit from the wholesaler and settle the bills within one and a half month. It is a general practice to employ servants for handling and weighing the commodities. The larger shopkeepers sometimes employ also clerks and accountants for maintaing account books. Sale shrinks in the rainy season especially during the months of July to September and expands during April, May and at the time of Diwali, Dasera and other religious festivals.

Pan, bidi, cigarettes and tobacco.

Next in importance to shops selling grocery are those selling pan, bidi, cigarettes and tobacco. There are about 379 such shops in Surat, 111 in Navsari, 117 in Bilimora and 200 in Bulsar. Most of them are one man establishments selling pan, bidi, cigarettes, chewing tobacco, betelnuts, catechu and occasionally confectionery. The stock in trade is obtained locally from wholesalers. A large number of these establishments make small quantities of bidies sufficient for their own sales. The value of stock in trade varies from Rs. 5 to Rs. 500. However in shops dealing exclusively in tobacco and snuff, the stock in trade is considerably large varying from Rs. 3,000 to Rs. 10,000. The Kaira district is the main source for importing various qualities of tobacco. The credit facility enjoyed by tobacco merchants from wholesalers is generally three months. The business of this catagory of shops is generally slack in the rainy season and brisk during the months of April and May and on Saturdays, Sundays and holidays.

Cloth and Hosiery.

Cloth and hosiery shops come next. They stock and sell all kinds of textiles—Cotton, woollen, silk, such as shirting, coating, sadis, dhotars, tapestry cloth, sweaters, mufflers, towels and all kinds of hosiery. Besides mill-made fabrics they stock and sell handloom products and *jari* articles for which the district is famous. A majority of shopkeepers purchase most of their requirements of all mill fabrics through the local agents of various textile mills and only a small quantity directly from the sources of origin like Bombay, Ahmedabad and Ludhiana. Handloom products manufactured within the district are obtained by the shopkeeper either directly from the factory owner or from the wholesale dealers. Most of these shops are owned by members of the traditional merchant communities. The value of the stock in trade of a shop is usually 500 but there are a few large shopkeepers who stock goods worth Rs. 50,000 to Rs. 1,00,000. The big shops employ salesmen and clerks.

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E. RETAIL TRADE.

As in the case of other shops, the rainy season is generally slack and sales shoot up during the marriage season. Credit is offered to those shopkeepers by wholesalers to the extent of 30 days but cash payment is generally the rule for hosiery goods.

Wood Fuel and Timber shops

While wood fuel shops deal in firewood, dried dung cakes, coal and coke, timber shops deal exclusively in timber used for building activities. There are about 215 wood fuel shops and 31 timber shops in Surat, 81 shops of both types together in Navsari, 25 wood fuel shops and 5 timber shops in Bilimora and 35 woodfuel shops and 3 timber shops in Bulsar. The lesser number of timber shops in Bilimora, and Bulsar-the two important timber trade centres, can be accounted for the fact that most of such shops are lying outside the municipal limits. A large quantity of firewood and timber is imported into the district by wholesale dealers from the forests of neighbouring Dangs and Songadh-Vyara forests. Both firewood and timber generally come in form of large blocks of wood which the local dealers split in suitable sizes while the stock in trade for wood fuel shops varies from Rs. 1,000 to Rs. 5,000, that of timber shops varies from Rs. 25,000 to Rs. 50,000. As firewood and coal are commodities which get wet during the rainy season, people are in the habit of storing them for use just before the onset of the monsoon. Their sales are therefore, abnormal just before the rainy season. The credit facility enjoyed by woodfuel merchant from wholesalers is generally one month whereas timber merchants have to pay cash for all dealings.

Stationery Cutlery, Bangles & Provisions.

Stationery, cutlery, bangles and provisions shops have been grouped together. In addition to stationery such shops sell toilet articles, bangles, hosiery, pencils, cutlery and provision goods. There are 66 such shops in Surat, 60 in Bilimora, 107 in Navsari and 61 in Bulsar. The majority of goods sold are brought from Bombay while the stock in trade of small merchants varies round about Rs. 1,000. Stock in trade of some of the big shops amounts to Rs. 1,00,000. The sales taper down during periods of scholastic vacation and mount up in the months of June and July when educational institutions reopen. The duration of credit facilities enjoyed by these traders is one month.

Leather goods and foot wear.

Footwear and other leather goods such as leather, accessories of shoe-making such as sewing thread, nails, clips, suitcases, belts, purses etc., are sold by shops grouped under leather goods and footwear. There are about 82 such shops in Surat, 160 in Bulsar, 56 in Navsari and 22 in Bilimora. This group comprises three distinct categories of shops. They are (i) shops which exclusively sell leather which is obtained by them locally ; (ii) shops which exclusively deal in footwear ; these shops either import footwear from Bombay, Agra, Kanpur etc., or make footwear of their own from locally purchased leather

or do both, the latter type of dealers engage workers on piece-wage to make footwears ; (iii) finally there are shops which not only deal in footwear but also in other leather goods such as suitcases, handbags etc., which they normally import from places outside the district. The value of stock in trade of these traders varies from Rs. 800 to Rs. 12,000. Buisiness is generally brisk during March to May and during Diwali days.

Sweetmeats and Eatables.

Among the groups of shops selling sweetmeats and eatables, some sell only sweetmeats, some sell only *sev*, *mumra*, *chevda*, *ganthia*, *bhajia*, *khaman* and "*bhusa*"—a mixture of all these—as it is popularly known in Surat district, while some shops sell both-sweets and farsan. There are 123 such shops in Surat, 20 shops in Bulsar, 114 in Navsari and 60 in Bilimora. Sales of Surati '*bhusa*' and other allied eatables are fairly steady throughout the year while those of sweets shoot up during the seasons of marriage and Diwali. The stock in trade of this type of shops varies in value from Rs. 500 to Rs. 5,000.

Cycle shops.

The bicycle forms the most important vehicle for the middle class and the poor in big cities like Surat and Navsari. There are a good number of shops dealing in cycles and cycle accessories. There are 157 such shops in Surat, 29 in Navsari, 15 in Bulsar and 10 in Bilimora. Only a few of these shops deal in new bicycles. Most do repair work. A number of them hire out cycles at a rate of Rs. 0-2-0 per hour and Rep. 1-0-0 per day. It has been calculated that in about a year, the total receipts from hiring out a bicycle generally equal its original cost. The small cycle shop usually stocks goods worth Rs. 250, while some of the bigger ones keep Rs. 5,000 worth of stocks. The monsoon is said to be a dull season for these shops.

Fruits and vegetables.

Most of the shops dealing in fruits and vegetables are small units, each managed by a single person and cater to the needs of their immediate neighbourhood. There are 105 such shops in Surat, 81 shops in Navsari, 50 shops in Bulsar and 5 shops in Bilimora. The lesser number of shops in Bilimora can be accounted for by the prevalence of large number of hawkers who come from neighbouring villages. Though fruit and vegetable shops are grouped together, they are two distinct categories of shops, one almost exclusively selling vegetables, the other dealing in fruits. While the stock in trade of vegetable shops varies from Rs. 20 to Rs. 400, the stock in trade of fruits shop varies from Rs. 1,000 to Rs. 5,000. These fruits and vegetable shops have a fairly steady business throughout the year but trade is more brisk during the summer season. The fruits and vegetables market in Surat and Chorasi talukas is regulated, the account of which is given separately. The duration of the credit facility enjoyed by these traders from wholesalers is generally eight days.

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Trade.
RETAIL TRADE
Mutton, Beef Eggs etc.

Shops selling mutton, beef and eggs are small units usually managed by one or two persons. There are 85 such shops in Surat, 26 shops in Navsari, 40 shops in Bulsar and only one in Bilimora. The stock in trade is obtained locally. The sales are steady more or less throughout the year.

Medicines.

Shopkeepers under the group 'Medicines' style themselves as chemists and drugists. There are 55 shops in Surat, 20 in Navsari, 12 in Bulsar and 25 in Bilimora. They sell chemicals of various kinds, foreign and indigenous drugs, medicines and surgical instruments. A large part of the chemicals, drugs and medicines stocked is of foreign origin and is brought from Bombay. Those manufactured in India are brought mainly from their sources of production, namely Bombay, Poona, Baroda and Ahmednagar.

Metal Utensils.

Metal utensils consist mainly of brass and copperware but those made of aluminium and stainless steel are also coming into general use. The manufacture of brass and copper utensils is a flourishing small scale industry of Surat district. Big dealers in this trade import copper and brass sheets from Bombay and get the utensils manufactured from *Kansaras* (smiths) or from small factories. The retail shopkeepers obtain their stock in trade from big dealers who are also manufacturers of such utensils. There are 63 such shops in Surat, 35 in Navsari, 8 in Bulsar and 10 in Bilimora. The stock in trade of individual dealers varies from Rs. 3,000 to Rs. 55,000.

TABLE No. 21

A TABLE SHOWING WARD—WISE BREAK UP OF RETAIL ESTABLISHMENTS IN SURAT

Shops.	Names of different wards.												Total	Total employment including employer.			Total
	Ward I	Ward II	Ward III	Ward IV	Ward V	Ward VI	Ward VII	Ward VIII	Ward IX	Ward X	Ward XI	Ward XII		Men	Wo-men	Child-ren	
1. Grocery ...	38	49	51	28	56	38	49	25	27	30	42	34	467	500	—	—	500
2. Fruits and Vegetables	7	10	15	5	12	7	8	4	12	4	13	87	105	163	9	—	172
3. Milk and Milk Products	9	15	8	21	15	6	12	12	13	11	11	13	146	218	—	—	218
4. Sweetmeats and Eatables	4	7	6	11	30	4	28	2	2	5	13	11	123	360	—	—	360
5. Sugarcane Juice ..	—	1	1	—	—	1	1	—	2	—	—	—	6	6	—	—	6
6. Mutton, Beef, Eggs, etc.	24	—	24	—	—	—	—	24	—	—	—	13	85	86	14	—	100
7. Pan, Bidi, Cigarettes ..	31	30	26	34	27	24	32	26	26	27	27	31	341	409	—	—	409
8. Tobacco and Snuff ..	3	4	11	4	5	1	—	2	—	—	2	6	38	50	—	—	50
9. Medicine	2	2	5	3	3	4	2	3	8	—	12	11	55	157	—	—	157
10 Stationery, Cutlery Bangles and Provisions	7	4	4	5	8	5	5	4	14	6	2	2	66	78	—	—	78
11. Leather Goods and Footwear	3	—	5	11	9	8	8	14	9	5	6	4	82	134	—	—	134

TABLE No. 21 (*Contd,*)

Shops	Names of different wards.												Total	Total employment including employer.			Total
	Ward I	Ward II	Ward III	Ward IV	Ward V	Ward VI	Ward VII	Ward VIII	Ward IX	Ward X	Ward XI	Ward XII		Men	Wo-men	Child-ren	
12. Cycles and cycle Accessories	6	9	14	13	5	8	12	8	5	10	37	30	157	232	—	—	232
13. Gramophone Radio, and Electric goods ...	2	—	4	7	2	2	6	2	1	8	18	5	57	85	—	—	85
14. Watches and Opticals	2	—	2	4	1	2	3	1	2	14	10	4	45	73	—	—	73
15. Umbrella, Locks and Trunks. ...	—	—	—	—	—	—	—	—	—	2	1	8	11	20	—	—	20
16. Wood Fuel	6	17	20	30	15	17	21	11	12	16	24	26	215	418	—	—	418
17. Motor, Motor Cycles Sales and Repairs	1	—	—	2	—	—	5	1	1	2	1	3	16	36	—	—	36
18. Cloth and Hosiery	3	10	5	10	4	5	3	1	2	6	8	6	63	93	—	—	93
19. Ready-made Clothes...	—	—	3	4	4	5	1	2	2	13	13	12	59	123	—	—	123
20. Photographic Goods...	—	2	—	—	—	—	1	2	—	2	3	2	12	29	—	—	29
21. Furniture	2	1	3	7	3	3	3	4	10	5	5	4	50	157	—	—	157
22. Utensils (Metal) ...	1	4	3	7	3	11	5	2	6	11	4	6	63	85	—	—	85
23. Hardware	2	2	3	5	5	2	8	1	3	3	6	5	45	64	—	—	64
24. Building Material ...	1	1	1	—	5	—	—	—	—	1	1	1	11	17	—	—	17
25. Timber	7	5	2	2	10	—	2	1	—	—	—	2	31	31	—	—	31

26. Flowers	2	3	3	3	—	1	2	5	7	1	2	2	31	—	—	—	—
27. Agarbatti, Hairoils, and perfumes ...	—	3	4	1	—	1	2	—	5	—	3	7	26	—	—	—	—
28. Frame Makers ...	—	3	4	1	2	2	2	1	—	2	1	3	21	—	—	—	—
29. Glass Mirrors, and Glassware	—	—	2	3	2	2	2	2	1	2	1	4	21	—	—	—	—
30. Cages	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
31. Agricultural Requisites	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
32. Zari	—	23	47	8	5	11	6	2	2	—	4	3	111	—	—	—	—
33. Ammunition and Power	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
34. Waste Materials ...	1	3	6	2	2	1	4	1	2	1	—	1	24	—	—	—	—
35. Booksellers and Publishers	—	—	1	9	3	—	3	—	4	2	2	1	25	—	—	—	—
36. Stationery and Newspapers	1	1	3	2	—	1	2	2	3	4	4	—	23	—	—	—	—
37. Petromax	—	—	1	2	—	—	—	1	1	3	2	2	12	—	—	—	—
38. Petrol	—	—	—	—	—	—	6	—	—	—	2	2	10	—	—	—	—
39. Leaf Cups and Platters	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
40. Sheep and Goats ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
41. Miscellaneous ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

CHAPTER 8.
Trade.
RETAIL TRADE

BULSAR

TABLE No. 22

A TABLE SHOWING WARD-WISE BREAK-UP OF RETAIL ESTABLISHMENTS

Shops.	Names of different wards.							Total.	Employment including Employer			Total.
	Ward I	Ward II	Ward III	Ward IV	Ward V	Ward VI	Ward VII		Men	Women	Children	
1	2	3	4	5	6	7	8	9	10	11	12	13
1. Grocery	44	48	18	73	36	37	37	293	716	92	14	822
2. Fruits and Vegetables	4	17	—	5	3	5	3	37	95	22	4	121
3. Milk and Milk Products ...	2	2	1	3	—	1	2	11	32	4	2	38
4. Sweetmeats and Eatables ...	11	11	—	3	9	8	7	49	143	11	5	159
5. Sugarcane Juice	10	1	—	2	2	1	1	17	36	—	2	38
6. Mutton, Beef etc.	1	—	—	1	25	—	—	27	56	12	3	71
7. Pan, Bidii Cigarettes ...	28	15	2	10	7	7	4	73	141	5	6	152
8. Tobacco and Snuff	7	11	1	12	3	4	2	40	82	14	2	98
9. Medicine	3	4	—	—	2	2	2	13	34	—	3	37
10. Stationery, Cutlery, Bangles and Provision.	8	26	—	4	3	14	6	61	126	13	4	143
11. Leather Goods and Footwear	5	14	2	8	1	—	—	30	94	—	2	96
12. Cycles and Cycle Accessories.	10	2	—	5	2	1	3	23	54	—	6	60
13. Gramophone, Radio and Electric Goods.	7	6	1	1	—	—	1	16	21	—	—	21

14. Watches and Opticals ...	2	6	—	—	—	3	2	13	28	—	—	28
15. Umbrella, Locks and Trunks.	1	1	—	—	—	1	—	3	7	2	—	9
16. Wood Fuel	9	2	6	13	18	3	7	58	129	12	4	145
17. Motor, Motor Cycles Sales and Repairs.	6	8	—	1	1	—	2	18	39	—	—	39
18. Cloth and Hosiery	3	41	1	9	11	11	6	82	184	8	7	199
19. Ready-made Clothes... ...	—	2	—	—	—	2	—	4	11	—	1	12
20. Photographic Goods... ...	4	2	—	—	—	—	1	7	13	—	—	13
21. Furniture	10	4	2	2	2	1	1	22	69	—	2	71
22. Utensils (metal)	1	—	—	8	—	3	4	16	51	—	—	51
23. Hardware	3	4	—	3	—	1	—	11	46	—	2	48
24. Building Material	1	—	—	2	—	—	1	4	9	—	—	9
25. Timber	—	—	—	6	1	—	—	7	22	—	2	24
26. Flowers	1	—	—	—	1	5	—	7	13	2	1	16
27. Agarbatti, Hairoils and perfumes.	—	1	—	—	1	—	—	2	4	—	—	4
28. Frame Makers	3	1	—	—	2	1	—	7	9	—	1	10
29. Glass Mirrors and Glassware.	—	1	—	—	—	1	—	2	4	—	—	4
30. Cages	—	—	—	—	—	—	—	—	—	—	—	—
31. Agricultural Requisites ...	3	4	15	5	—	—	1	28	58	—	2	60

TABLE No. 22 (Contd.)

Shops.	Names of different wards.							Total	Employment including Employer			Total
	Ward I	Ward II	Ward III	Ward IV	Ward V	Ward VI	Ward VII		Men	Women	Children	
1	2	3	4	5	6	7	8	9	10	11	12	13
32. Jari	12	14	1	2	3	—	5	37	146	—	8	154
33. Ammunition and Power ...	—	—	—	—	—	—	—	—	—	—	—	—
34. Waste Material	—	1	—	—	—	—	—	1	2	—	—	2
35. Booksellers and Publishers ...	—	4	—	—	—	—	1	5	11	2	1	14
36. Stationery and Newspapers	5	—	—	—	—	3	—	8	15	2	1	18
37. Petromax	—	—	—	—	—	—	—	—	—	—	—	—
38. Petrol	4	—	—	—	—	—	—	4	10	—	—	10
39. Leaf Cups and Platters ...	—	—	—	—	—	—	—	—	—	—	—	—
40. Sheep and Goats	—	—	—	—	—	—	—	—	—	—	—	—
41. Miscellaneous	32	24	14	33	54	16	24	197	412	101	9	522
Total ...	240	277	64	211	187	131	123	1,233	2,922	302	94	3,318

CHAPTER 8.

Trade

RETAIL TRADE

BILIMORA

TABLE No. 23

A TABLE SHOWING WARD-WISE BREAK UP OF RETAIL ESTABLISHMENTS.

Shops	Names of different wards.												Total	Total employment including employer			Total
	Ward I	Ward II	Ward III	Ward IV	Ward V	Ward VI	Ward VII	Ward VIII	Ward IX	Ward X	Ward XI	Ward XII		Men	Wo-men	Child-ren.	
1. Grocery	17	10	6	8	37	20	9	10	1	—	—	—	118	358	59	7	424
2. Fruits and Vegetables	—	4	—	—	1	—	—	—	—	—	—	—	5	12	2	—	14
3. Milk and Milk Products	1	—	2	—	—	3	1	1	1	—	—	—	9	18	1	19	—
4. Sweetmeats and Eatables	4	16	4	—	15	8	4	9	—	—	—	—	60	292	6	10	308
5. Sugarcane Juice ...	1	1	2	—	1	—	—	1	—	—	—	—	6	14	—	—	14
6. Mutton, Beef, Eggs. etc.	—	1	—	—	—	—	—	—	—	—	—	—	1	9	—	—	9
7. Pan, Bidi, Cigarettes	4	19	3	3	12	5	2	4	—	—	—	—	52	88	—	1	89
8. Tobacco and Snuff ...	1	6	—	—	19	2	1	1	35	—	—	—	65	75	—	—	75
9. Medicine	3	1	2	—	9	7	1	1	1	—	—	—	25	42	—	—	42
10. Stationery, Cutlery, Bangles and Provisions	—	15	6	—	28	7	—	4	—	—	—	—	60	98	23	—	121

CHAPTER 8.

Trade

RETAIL TRADE

TABLE No. 23 (Contd.)

Shops	Names of different wards.													Total employment including employer			
	Ward I	Ward II	Ward III	Ward IV	Ward V	Ward VI	Ward VII	Ward VIII	Ward IX	Ward X	Ward XI	Ward XII	Total	Men	Women	Children.	Total
11. Leather Goods and Footwear	2	3	5	—	6	4	2	—	—	—	—	—	22	37	4	—	41
12. Cycles and Cycle Accessories	2	2	1	—	4	—	—	1	—	—	—	—	10	21	—	—	21
13. Gramophone, Radio and Electric goods ...	—	5	—	—	4	—	—	—	—	—	—	—	9	14	—	—	14
14. Watches and Opticals	—	2	1	—	4	1	—	1	—	—	—	—	9	21	—	—	21
15. Umbrella, Locks and Trunks	1	1	4	—	1	—	—	—	—	—	—	—	7	14	—	1	15
16. Wood Fuel	2	1	1	1	5	1	4	3	1	—	—	—	19	34	2	—	36
17. Motor, Motor Cycles Sales and Repairs ...	1	1	—	4	—	—	—	—	—	—	—	—	6	11	—	—	11
18. Cloth and Hosiery ...	1	6	4	—	30	3	—	—	—	—	—	—	44	90	2	—	92
19. Ready-made Clothes...	—	2	1	—	3	—	—	—	—	—	—	—	6	8	—	—	8
20. Photographic Goods...	—	4	1	—	—	—	—	—	—	—	—	—	5	10	—	—	10
21. Furniture	5	2	—	—	5	7	2	2	—	—	—	—	23	109	—	4	113
22. Utensils (Metal) ...	—	—	2	—	7	1	—	—	—	—	—	—	10	28	1	—	29
23. Hardware	6	3	—	—	5	—	—	2	—	—	—	—	16	41	—	—	41

24. Building Mateirals ...	—	—	—	3	—	—	3	2	—	—	—	—	8	24	—	—	24
25. Timber	1	—	—	—	—	—	3	1	—	—	—	—	5	20	—	—	20
26. Flowers	—	5	—	—	1	1	—	—	—	—	—	—	7	22	3	—	25
27. Agarbatti, Hairoils and perfumes	—	—	—	—	1	—	—	—	—	—	—	—	1	1	—	—	1
28. Frame Makers ...	—	—	1	—	—	1	—	—	—	—	—	—	2	2	—	—	2
29. Glass Mirrors and Glassware	—	1	1	—	—	—	—	—	—	—	—	—	2	3	—	—	3
30. Cages	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
31. Agricultural Requisites	7	—	—	—	—	—	—	—	—	—	—	—	7	24	—	—	24
32. Waste Material ...	—	2	1	—	—	—	—	—	—	—	—	—	3	9	—	—	9
33. Booksellers and Publishers	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
34. Zari								N	....	I	....	L	—				
35. Ammunition and Power								N	......	I	....	L					
36. Stationery and Newspapers								N	... ...	I	....	L					
37. Petromax	1	—	—	—	—	—	—	—	—	—	—	—	1	4	—	—	4
38. Petrol	3	—	—	—	—	—	—	—	—	—	—	—	3	6	—	—	6
39. Leaf Cups and Platters								N	....	I	....	L					
40. Sheep and Goats ...								N	. .. ...	I	....	L					
41. Miscellaneous ...	22	40	30	19	85	65	17	12	1	—	—	—	291	631	12	5	648

CHAPTER 8.

Trade

SALES TAX

The following statement compiled from the quarterly returns under the Bombay Sales Tax Act, 1946 shows for Surat City and six other towns viz. Rander, Navsari, Gandevi, Bilimora, Bulsar and Vyara, the number of registered dealers according to their trades and their total turnover for the period from 30th June 1952 to 31st March 1953.

TABLE No. 24

STATEMENT SHOWING THE NUMBER OF REGISTERED DEALERS AND THEIR TOTAL TURNOVER FOR SURAT CITY, RANDER, NAVSARI, BULSAR BILIMORA, GANDEVI, AND VYARA TOWNS FOR THE PERIOD 30TH JUNE 1952 TO 31ST MARCH 1953

(Figure of gross turnover in thousands)

Area	Foodstuffs and Hotels		Clothing and Consumer Goods		Building Meterials		Transport and Vehicle Goods		Machinery and Capital Goods		Fuel and Power		Industrial Commodities		Miscellaneous Goods		Total All Commodities	
	No	G.T.O.	No.	G.T.O.	No.	G.T.O.	No.	G.T.O	No.	G.T.O	No.	G.T.O	No.	G.T.O	No.	G.T.O.	No.	G.T.O.
1. Surat City ..	1,879	77,970	6,160	2,90,594	187	5,483	48	2,030	134	2,026	70	4,997	144	5,129	125	3,378	8,747	3,91,607
2. Rander Town ..	58	1,119	15	114	8	122	—	—	—	—	—	—	20	426	—	—	101	s1,781
3. Navsari Town ..	253	6,125	369	6,297	35	836	4	34	8	67	32	380	25	503	12	123	738	14,365
4. Gandevi Town ..	39	887	64	654	12	122	—	—	—	—	3	121	—	—	—	—	118	1,784
5. Billimora Town ..	101	4,778	72	3,473	52	2,799	—	—	—	—	4	5	—	—	2	10	231	11,065
6. Bulsar Town ..	128	7,630	176	3,753	45	1,734	—	—	—	—	7	157	18	1,529	14	246	388	15,049
7. Vyara Town ..	178	4,795	19	108	12	188	—	—	—	—	1	17	1	1	—	—	211	5,109
Total ..	2,636	1,03,304	6,875	3,04,993	351	11,284	52	2,064	142	2,093	117	5,677	208	7,588	153	3,757	10,534	4,40,760

Note:— Table prepared from the Statistical Returns submitted by the Sales Tax Officer, Surat and Sales Tax Officer, Navsari Dn. and Dangs Districts.

CHAPTER 8.

Trade.

SALES TAX

The statement shows that during the period under review i. e. June 1952 to March 1953 there were 10,534 dealers, registered under the Act, with a total turnover of Rs. 44,07,60,000/- in the Surat city and rest of the towns. Surat city accounted for 8747 dealers with a turnover of Rs. 39,16,07,000/-. Navsari came next with 738 dealers and a turnover of Rs. 1,43,65,000/- followed of by Bulsar town having 388 dealers and a turnover of Rs. 1,50,49,000/-. Bilimora claimed 231 dealers having a turnover Rs. 1,10,65,000/-. Seeing the statement vertically, it can be seen that dealers in the group of "clothing and consumer goods" formed the largest single group (6875) and their total turnover amounted to Rs. 30,49,93,000/- followed by those in "Foodstuffs and Hotels" with 2636 dealers and turnover of Rs. 10,33,04,000/-. The next group of dealers fell in the category of "building materials". Their number was 351 and turnover Rs. 1,12,84,000/-.

Shopkeepers dealing in "transport and vehicle goods" and "machinery and capital goods" were to be found in Surat and Navsari only. Other shops dealing in "fuel and power and industrial commodities" were in Surat, Navsari, Rander, Bulsar and Vyara.

HAWKERS

Like pedlars, in rural areas their counterparts in urban areas namely hawkers in various towns of Surat district play an important part in retail trade. As the table reveals, the hawking system seems to prevail in all towns. These hawkers move from place to place and go on hawking merchandies. The hawkers carry goods either on their heads or on handcarts. The commodities they handle include milk, fresh fruits, vegetables, sprouted grains, fish, bread, parched grains, sweets, dry fruits, cloth. ready made clothes, hosiery, icecreams, icefruits, readymade tea, pepermints, metal utensils, toys, stationery, cutlery, crockery, grocery, soaps, agarbattis, panbidi-cigarettes, etc. With a view to regulate the activities of hawkers, the municipalities of Surat, Bilimora and Vyara have introduced the system of licencing these hawkers. However hawker's trade is not licenced by the municipalities of Rander, Kathor, Bulsar, Dharampur, Gandevi and Navsari. Thus it seems that hawkers' trade is not licenced in a majority of municipalities and even where it is licenced, licensing is not applied to all articles but only to a selected few and in majority of cases to those who use vehicles for carrying their goods.

CHAPTER 8.

Trade

HAWKERS

NUMBER OF HAWKERS IN TOWN MUNICIPALITIES OF SURAT DISTRICT

No.	Name of town.	No. of hawkers.		Commodities sold.	Licence charge.
		Licensed	Unlicensed.		
1.	Surat ...	1,000	500	—	Rs. 6 p. a. for handcarts.
2.	Rander...	—	7	—	Rs. 2 p. a. for headloads.
3.	Gandevi ...	—	40	—	Rs. 4. p. a. for handcarts.
4.	Kathor ...	—	4	Cloth	
		—	7	Coal & Wood fuel.	
5.	Vyara ...	7	—	Food stuffs	Rs. 3 p. a. for handcarts.
		10	—	Others	Rs. 2 p. a. for headload.
6.	Navsari ...	—	300	—	—
7.	Bilimora ...	71	—	Food stuffs	Rs. 5 p. a.
			20	Cloth	
			5	Alu, Sunth, paper etc.	—
			50		—
8.	Bulsar ...				
9.	Dharampur ...				—

1. Items under commodities sold include all articles listed in hawker's account unless specifically mentioned.

2. For 8 and 9, information not received as hawkers' trade is not licensed.

THE SURAT CHAMBER OF COMMERCE.

The Surat Chamber of Commerce is a central organisation representating trade and industry of the district and with several trade associations affiliated to it. The Chamber was established in 1941 and is recognised by the Government of India. It has got representation on the Local Telephone Advisory Committee, the Regional Employment Exchange Advisory Committee and the Labour Advisory Committee of the State Governments.

The Chamber rendered great assistancce to the Jari and the Small Scale Weaving industry of the district in the matter of supply of raw materials and marketing of finished products. During 1946 the Chamber was also entrusted with the work of price fixation of cloth produced by small powerloom factories. The Chamber also evinced keen interest in the improvement of production techniques of jari and weaving industrv.

CHAPTER 8.

Trade

THE SURAT CHAMBER OF COMMERCE.

During the period of rationing and control of foodgrains the Chamber formed *anaj rahat samiti* and conducted Fair Price Shops for the poorer sections of the community. Besides this from time to time on behalf of the merchantile community it has taken up various matters relating to road and rail transport; postal and telegraphic facilities, cheep supply of electricity and the development of Surat Port.

In the year 1952, the Chamber was mainly instrumental in bringing about an amicable settlement of all labour disputes by devising a scheme of voluntary arbitration acceptable to both industry and labour.

The Chamber has contributed much to the development of Small Scale Industries of the district by representing their various grievances to the Government for their redress.

PRICES.

Statements regarding wholesale and retail prices in Surat current on 31st January 1954 are given below :—

TABLE No. 25

WHOLESALE PRICES CURRENT IN SURAT ON THE LAST DAY OF THE FORTNIGHT ENDED 31ST JANUARY, 1954.

Commodities	Variety/Quality	Unit	Rs. As. P.
Cereals—			
Paddy ...	Fine	...	14 5 0
	Medium	...	13 11 0
	Coarse	...	12 13 0
Rice	Fine		21 6 0
	Medium		20 5 0
	Coarse	...	19 5 0
Wheat ...	White	...	20 5 0
Pulses (Whole Pulses)—			
Gram ...		...	18 0 0
Arhar (Tur) ...	...	...	15 0 0
Mung	...	...	18 0 0
Adad ...	..	...	18 0 0
Masur ...	...	..	18 0 0
Sugar and Gur—			
Gur ...	Sort I	...	28 0 0
Sugar refined ...	D-24	...	35 0 0
Oilseeds, Oils and Oilcakes—			
Groundnut ..	Unshelled	...	19 0 0
	Machine shelled	...	25 12 0
Groundnut oil ...			56 0 0
Sesamum	White	...	32 0 0
Sesamum oil ...	...	...	63 0 0
Castor seed ...		...	18 0 0
Castor oil ...		...	42 0 0
Coconut ...	Nuts (per thousand)	...	330 0 0
	Copra	...	63 0 0
Coconut oil	...	...	81 0 0
Vegetable oil	Vanaspati	...	84 0 0
Fruits, Vegetables and nuts—			
Fruits :—			
Plantains ..	...	Per gross	3 0 0
Oranges ...	..	Per gross	15 0 0
Vegetables :—			
Potatoes ...	...	..	7 0 0
Onions ..	...	...	5 0 0
Tobacco—			
Country ...	Leaf	...	170 0 0
Livestock			
Work cattle :—			
Work bullocks .	Class I	Per head	600 0 0
	Class II	Per head	400 0 0
buffalo bulls ..	Class I	Per head	500 0 0
	Class II	Per head	300 0 0
Milch cattle—			
Cows ..	Class I	Per head	200 0 0
	Class II	Per head	100 0 0
Buffaloes ...	Class I	Per head	500 0 0
Sheep ..	.	Per score	350 0 0
Livestock products			
Ghee ...	Agmark	...	226 0 0
	Ungraded	..	255 1 0
Condiments and Spices—			
Turmeric .	...	...	20 0 0
Tamarind ...	...	..	36 0 0
Dry chillies ...	...	...	70 0 0
Miscellaneous—			
Sticklac ...	...	Cubic foot	5 8 0

* When there is no reference to any specific quality, *fair average* quality is implied.

‡ Prices are given in rupees per standard of lbs. unless otherwise specified.

CHAPTER 8.

Trade

PRICES

TABLE No. 26

RETAIL PRICES CURRENT IN SURAT ON THE LAST DAY OF THE FORTNIGHT ENDED 31st JANUARY, 1954*

Commodities	Variety/Quality	Unit	S. Ch.
Cereals—			
Paddy ...	Coarse	...	3 1
Rice	Coarse		2 1
Wheat ...	White	...	1 15
Pulses—			
Gram ...	Whole	...	2 5
Arhar (Tur) ...	Whole		2 5
Moong	Whole	...	2 10
Adad ...	Whole	...	2 5
Masur	Whole	...	2 5
	Split (both with and without skin)		2 4
Sugar and Gur—			
Gur ...	Sort I	..	1 4
	Sort II	...	1 6
Sugar refined ...	D-24	...	1 2
Oils—			
Groundnut oil ...	...	...	0 11
Sesamum oil ...	..	...	0 10
Castor oil ...	...	...	0 15
Cocoanut oil ...	...	...	0 7
Vanaspati ...	...	...	0 7
Fruits, Vegetables and Nuts—			
Fruits :			Rs. As. P.
Plantains ..	...	Per dozen	0 4 0
Oranges ..	...	Per dozen	1 4 0
Vegetables—			S. Ch.
Potatoes	...	...	5 0
Onions .	...	...	8 0
Livestock products—			
Milk ..		...	1 9
Ghee ..	Agmark	..	0 3
			Rs. As. P.
Eggs ...	A Grade	Per dozen	1 12 0
Mutton ..	...	Per seer	2 0 0
Beef ...	..	Per seer	0 13 0
Condiments and Spices—			
Turmeric ..	...	..	4 0
Tamarind ..	...	...	1 0
Dry Chillies ..	...	...	0 9
Miscellaneous—			
Salt .	...	...	18 0
			Rs. As. P.
Kerosene oil ...	...	Per gallon	18 0

*Prices in seers and chhataks (of 80 and 5 tolas respectively) per rupee unless otherwise stated. When quality is not specified *fair average* quality is implied.

CHAPTER 9—TRANSPORT AND COMMUNICATIONS

INTRODUCTION

THE GENERAL CONDITION OF TRANSPORT and communications in the 19th century in Surat district was very poor. As emphasis was chiefly laid on self-sufficiency of villages, means of communication by themselves never received particular attention. There were a few fair weather tracks euphemistically called roads ; they were mainly earthern tracks. These, though rough, were quite sufficient then during the fair season for purposes of traffic and social intercourse. Communications along them ceased during the rainy days and any one forced to travel between June and October was either carried in a palanquin or a *doli* by men, or went on horse-back or rode a bullock.

Political as well as economic conditions changed at the turn of the century and they were mainly responsible for the later developments in roads and railways. With the consolidation of British rule for many decades, general safety of life and travel had increased, while on the economic side foreign consumer goods flooded the domestic markets. Villages could no longer retain their position of self-sufficient economic units. Railways were laid ; new roads constructed and the old ones made up-to-date for economic or military considerations.

The old Gazetteer mentions that in 1863 there were only five made roads of a total length of 19 miles. It was after the introduction (1863) of the local fund cess for making roads, that progress in that direction began to be made. In 1876 the road mileage had increased to 314.5. In 1951 there were 746.25 miles of roads, excluding other district roads and village roads. The length of the railway line passing through the district was 73.5 miles in 1876. It had increased to 214.25 miles in 1951.

CHANGES IN TRANSPORT AND COMMUNICATIONS SINCE 1880

The table below is indicative of the increased importance of transport and communications in the district.

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TABLE No. 1

NUMBER OF PERSONS ENGAGED IN TRANSPORT AND COMMUNICATIONS IN 1881 AND 1951

1881		1951	
Category.	No. of persons engaged.	Category	No. of persons engaged.
Railways	591	Railways	3,552
Roads	1,527	Roads	3,085
Canals and rivers (and Seas)	2,494	Water	1,962
		Air	N.A.
Message	648	Postal Services ...	859
		Telegraph services ...	39
		Telephone services ...	28
		Wireless services ...	1
	5,260		9,526

RAILWAYS.

The entire railway system in the district has been divided into four sections by the Western Railway authorities. These sections are :—

(1) Karambele--Hathuran (both inclusive ; on the main Bombay-Surat-Baroda broad-gauge route).

(2) Surat-Bhadbhunja (Surat and Udhna excluding ; on the Surat-Nandurbar-Bhusaval, broad-gauge route).

(3) Bilimora-Waghai (narrow-gauge).

(4) Kosamba--Umberpada (narrow-gauge).

Of the total length of 217.25 miles there are 140 miles of broad-gauge and 77.5 miles of narrow-gauge.

Karambele-Hathuran.

This is a section of the main Bombay-Surat-Baroda broad-gauge route, which enters the district at Vapi and passes through the whole length of the district from south to north, a distance of 85 miles[1]. It runs along with the coast line, with an

1. The old Gazetteer mentions 73.5 miles. Increase in mileage is due to changes in territory.

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RAILWAYS

average distance of five miles from the coast, up to Bulsar. That distance continuously increases as we move from Bulsar to Panoli. The line proceeds North-north-east after Bulsar till it reaches Bilimora and then north-west to reach Surat and again proceeds north-east to enter Broach district at Panoli.

A single line running between Vapi and Panoli was opened for traffic in stages between 1860 and 1864 and was converted into double line in stages between 1867 and 1902.

The section is provided with 20 stations. These with their distances from Bombay are : Vapi (105), Udvada (111), Pardi (114), Bulsar (121), Dungari (126), Bilimora (132), Amalsad (135), Vedcha (140), Navsari (145), Maroli (150), Sachin (154), Bhestan (157), Udhna (161), Surat (163), Utran (166), Kosad (168), Sayan (172), Kim (178), Kosamba (183) and Hathuran (186).

Surat, Bilimora and Kosamba are junctions. From Surat emanates the 'Tapi-Valley' railway, from Bilimora the 'Bilimora-Waghai' narrow-gauge railway, a section of the ex-G. B. S.[1] Railway now forming a part of the Western Railway, and from Kosamba, the Kosamba-Umarpada narrow-gauge railway, a section of 39 miles of the ex-G. B. S. Railway, now forming a part of the Western Railway.

At Bulsar, which is the district headquarters of the Bulsar division of the Western Railway, is located a big loco-shed, employing about 1,000 skilled and semi-skilled artisans and engine drivers and unskilled labourers. It accommodates about 61 engines, which provide power for passenger and goods trains running between Bombay and Baroda.

Udvada is a centre of great religious and historical importance. The zoroastrians, when they came from Iran and landed at Sanjan only a few miles away settled at this place and built a big Fire temple which is considered to be the holiest of their holy places and a place of pilgrimage for all Zoroastrians.

Surat-Bhadbhunja.

This section of 55 miles was opened for traffic in stages between 1898 and 1899. It takes off from Udhna junction on the Western Railway main line, proceeds in the eastern direction to enter West Khandesh district near Bhadbhunja. It passes through the fertile cotton growing areas of Surat district and touches places of importance like Bardoli, Madhi and Fort Songadh. The length of three miles between Surat and Udhna is common to 'Karambele-Hathuran' and 'Surat-Bhadbhunja' sections.

1. G. B. S.— Gaekwar's Baroda State.

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Including Surat and Udhna there are 13 stations on this line. These, with their distances in miles from Surat, are : Surat (O), Udhna (3), Niol (7), Chalthan (10), Bagumra (13), Gangadhra (16), Bardoli (20), Timberva (25), Madhi (29), Kaher (33), Vyara (39), Doswada (47) and Fort Songadh (50).

The Town of Bardoli is famous as the place which was the centre of the Satyagraha movement, against extortionate land revenue assessments under British rule, launched in 1928 by Sardar Vallabhbhai Patel.

At a distance of 16 miles from Madhi is the famous Kakrapara dam accross the river Tapi. The 51st session of the Indian National Congress was held near Madhi at 'Vithal Nagar'.

Fort Songadh is historically important having been a strategic possession of the Marathas.

Bilimora-Waghai

The portion of this section that lies within the limits of the district is about 36 miles long, and was opened for traffic by stages between 1914 and 1926. It formed a part of the net-work of the then Gaekwar's Baroda State Railways which were operated upto 30th September 1921 by the Bombay, Baroda and Central Indian Railway Company. Thereafter its working and maintenance were taken over by the Durbar. With the merging of the State with the Indian Republic the line passed on to the Government of India, from 1st August 1949.

This branch line emanates at Bilimora on the Bombay-Baroda main line and runs in the eastern direction passing through the talukas of Gandevi, Chikhali and Bansda to enter the dense forest of Dangs at Dungarda.

Excluding Bilimora there are eight stations on this line. These with their distance in miles from Bilimora are : Gandevi (3.5), Chikhali Road (8.25); Rankuva (13.5); Dholikuva (17.5); Anawal (21.25); Unai and Bansda Road (26); Kevdi Road (32) and Kala-Amba (35).

It serves mostly forest area. The main traffic on the section is of timber, firewood, bamboos, tiles and grass.

Kosamba-Umbarpada.

Originally (1912) this line was laid up to Zankhva and then extended in 1929 upto Umbarpada. Starting from Kosamba, a station on the Bombay-Surat-Baroda main line, it passes through the rich cotton lands of Mangrol taluka, a distance of 38.25 miles.

Excluding Kosamba the section is provided with eight stations. These with their distances, in miles, from Kosamba are ; Velachha (4.75) ; Asarma (8.5) ; Simodra (10.5) ; Mota-Miya Mangrol (14.5) ; Vankal (19.5) ; Zankhvav (25.5) ; Keori (36) ; and Umberpada (38).

A general idea of the volume of traffic can be had from the table given below showing the number of passengers and tons of goods booked at every station during 1952-53

TABLE No. 2

NUMBER OF PASSENGERS AND TONS OF GOODS BOOKED AT EACH STATION ON THE WESTERN RAILWAY IN SURAT DISTRICT DURING 1952-53.

Section	Station	No. of passengers booked	No. of tons booked
1. Karambele-Hathuran .. (On the Bombay-Surat-Baroda, broad gauge route).	Vapi ...	2,61,588	48,004
	Udvada ...	1,74,643	76,397
	Pardi ...	1,07,168	31,138
	Bulsar ...	5,50,675	74,172
	Dharampur ... (Out Agency of Bulsar station).	476	175
	Dungri ...	1,07,258	46,319
	Bilimora ...	7,03,592	47,176
	Amalsad ...	2,32,229	2,574
	Vedcha ...	1,38,818	1,604
	Navsari ...	8,02,673	20,280
	Maroli ...	2,36,123	521
	Sachin ...	1,54,060	1,318
	Bhestan ...	21,187	—
	Udhna ...	71,761	1,842
	Surat ...	15,64,099	48,204
	Utran	47,623	3,498
	Sayan ...	2,16,989	3,983
	Kim ...	1,86,008	4,274
	Kosamba ...	2,24,304	15,479
	Hathuran ...	32,922	N.A.
	Total ...	58,44,196	4,26,958

Section	Station	No. of passengers booked	No. of tons booked
2. Surat--Bhadbhunja ... (On Surat-Nandurbar--Bhusawal broad guage route).	Niol ...	17,515	59
	Chalthan ...	84,977	2,590
	Bagumra ...	29,384	N.A.
	Gangadhara ...	63,084	2,389
	Bardoli ...	2,67,405	18,030
	Timberva ...	37,623	1,581
	Madhi ...	2,26,727	10,962
	Kaher (a) ...	—	33
	Vyara ...	1,80,061	14,532
	Doswada (b) ...	—	—
	Fort Songhad...	83,051	14,470
	Total ...	9,89,827	64,646
3. Bilimora--Waghai ...	Gandevi ...	49,500	594
	Chikhali Road	42,932	530
	Rankuva ...	49,958	2,823
	Dholikuva ...	26,926	664
	Anawal ...	45,886	2,417
	Unai and Bansda Road	87,985	6,759
	Kevdi Road ...	21,909	10,646
	Kala-Amba ..	4,954	6,422
	Total ...	3,30,050	30,855
4. Kosamba--Umarpada ...	Velachha ...	35,938	74
	Asarma ..	19,220	—
	Simodra ...	25,792	45
	Mota-Miya-Mangrol ...	73,345	2,762
	Vankal ..	49,882	1,533
	Zankhvav ...	37,482	5,833
	Umarjar (c) ...	—	—
	Keori ...	18,048	7,898
	Umarpada ...	19,016	10,332
	Total ..	2,78,723	28,477
	GRAND TOTAL ...	74,42,796	5,50,936

(a) Kaher is a flag station (an unimportant station) ; its traffic has been included in the traffic of Vyara station.

(b) Doswada is a flag station ; its passenger traffic has been included in the traffic of Surat station.

(c) Umarjar is a flag station ; its traffic has been included in the traffic of Zankhvav station.

ROADS

The largest number of passengers were booked at Surat, next comes Navsari followed by Bilimora, all of which are on the 'Bombay-Surat-Baroda' main lines. In the case of goods transport the first place goes to Udvada, the second to Bulsar and the third to Vapi. All these stations are on the Bombay-Surat-Baroda route.

Classification of Roads.

Roads in Surat district, as in other districts, are now classified, according to their importance, in to four categories, namely, (i) National Highways, (ii) State Highways, (iii) Major District Roads, and (iv) Other District Roads.

"National Highways" have been defined as "main highways serving predominantly national, as distinct from State, puposes, running through the length and breadth of India, which together form a system connecting (by routes as direct as practicable) major ports, foreign highways, capitals of States, and including highways required for stretegic movements for the defence of India."

"State Highways" have been defined as "all other main trunk or arterial roads of a State connecting up with National Highways or State Highways of adjacent States, district head-quarters and important cities within the State, and serving as main arteries of traffic to and from district roads". These are usually maintained by State Governments and are generally bridged and metalled and are completely motorable througout the year, except that sometimes where there are causeways or submergible bridges, traffic may be interrupted in the monsoon for very short periods. State Highways usually have connections with National Highways.

"Major District Roads" are roughly of the same specifications as State Highways. These roads connect important marketing centres with railways, State Highways and National Highways.

"Other District Roads" are also of the same type as major district roads, except that they are subject to more frequent interruptions of traffic during the rains. They also serve market places. These are generally unmetalled.

The state highways and in most cases the major district roads are constructed and maintained by the State Public Works Department, but the cost, unlike in the case of the national highways, is met out of state funds.

Bombay-Ahmedabad-Delhi Road.

NATIONAL HIGHWAYS.

The Bombay-Ahmedabad-Delhi, National Highway No. 8, is the only one of its kind that passes through Surat district. It starts

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from Bombay, passes through Thana district and enters Surat, at the river Damanganga on its southern border, at 129 miles and two furlongs and leaves the district at mile 230. Thus its length in the district is 100 miles and 6 furlongs.

Running from south to north it passes through Pardi, Bulsar, Chikhli, Gandevi, Navsari and Chorasi talukas of Navsari division and Palsana, Kamrej and Mangrol talukas of Surat Division.

Going from south to north it touches following places in the district :—

		Mile No.	
Vapi	... ...	132.25	I.B.
Udwada	... ...	138.67	
Pardi	... ...	142.25	D.B.
Parnera fort	... ...	146.12	
Bulsar	... ...	151	D.B.
Sonwada	... ...	159	
Hond	... ...	164	
Malwada	... ...	165	
Chikhai	... ...	166	D.B.
Thala	... ...	168	
Alipore	... ...	170	
Endhal	... ...	173	
Khaparia	... ...	174	
Matwad	... ...	176	
Boriach	... ...	176	
Astagam	... ...	178	
Unn	... ...	181	
Sisodra	... ...	183	
Kabilpore	... ...	185	
Kaliawadi	... ...	185	
Navsari	... ...	185	
Verval	... ...	188	
Kasba	... ...	189	
Amli	... ...	190	
Vejalpore	... ...	192	
Veshma	... ...	194	
Palsana	... ...	198	
Baleshwar	... ...	200	
Chalthan	... ...	203	
Kadodra	... ...	205	
Ubeil	... ...	206	
Vav	... ...	209	
Kholwad	... ...	212	
Kathor	... ...	213	R.H. 1
Pardi	... ...	215	
Pimpodra	... ...	218	

I. B.=Inspection Bunglow.
D. B.=District Bunglow.
R. H. 1= Rest House.

Kim junction	...	220	
Moti Naroli ...	...	221	
Kosamba ...	...	224	R.H[2].
Mahuvej ...	...	225	
Dhamrod ...	...	227	
Nana Borsora ...	...	229	

The following roads either take off from it or are crossed by it :—

Place of point of Junction	Name of the Road.	Class of the Road.
Vapi ...	Vapi-Ambheti Road.	O. D. R.
	Lavachali-Vapi-Daman Road	M.D.R.
Udwada ...	Udwada-Dhangadnad Road.	O.D.R.
Pardi ...	Pardi-Chival-Jogwel Road.	M.D.R.
Parnera ...	Parnera-Rabda-Ozar Road.	O.D.R.
	Bulsar-Tithal-Bugod-Parnera Road.	
Bulsar ...	Bulsar-Dharampur-Huda-Rajbari-Peint-Nasik Road.	S.H3.
	Bulsar-Tithal-Parnera Road.	O.D.R.
	Bulsar-Khergam-Dharampur Road.	M.D.R.
Sarodhi ...	Segwa-Dharampur-Sardohi Road.	O.D.R.
Chikhli ...	Bilimora-Chikhli-Bansda-Waghai-Nasik Road.	S.H.
Sisodra ...	Sisodra-Nihali-Mahuwa Road.	M.D.R.
Kabilpore ...	Tarsadi-Kadod-Bardoli-Sarbhon Road.	M.D.R.
	Kosba-Ponsra Road.	O.D.R.
Vesma ..	Naroli-Vesma-Umrath Road.	M.D.R.
M. 149. .	Bulsar-Dharampur-Huda-Peint-Nasik Road.	S.H.
Chikhali ..	Bilimora-Chikhali-Bansda-Waghai Road.	S.H.
M. 169/7. ..	Bilimora-Waghai N. G. Railway.	
M. 171/4. ...	Road to Tankal.	
	Rankuva-Nogma Road.	V.R.
M. 185/6 .	Road to Bardoli.	
M. 193/5 .	Vesma-Maroli-Umrath Road.	M.D.R.
Palsana .	Palsana-Bardoli Road.	O.D.R.
Kadodra junction ..	Dumas-Surat-Dhulia-Malkapur-Nagpur-Deogadh-Cuttack Road.	S.H.
M. 208 .	Sheoni-Nagod Road.	O.D.R.
	Vav-Jokha-Orna Road.	
Kamrej Junction .	Surat-Nanavarachh-Sarthana-Kamrej-Moti-Palod-Kolad-Madhi Road.	M.D.R.
Kathor Junction in mile no. 213.	Olpad-Sayan-Kathor-Kamrej Road.	M.D.R.
Pardi ..	Bodhan-Ghala-Kanjan Road.	O.D.R.
Kim Jn. ...	Vadoli-Kim-Mandvi-Maltha-Umarpada-Sagbara Road.	S.H.
Kosamba Jn. ..	Kosamba - Velachha - Mangrol - Wankal Zankhvav Road.	M.D.R.

The sections between mile No. 212 and 213 near Tapi river and between mile No. 220 and 222 near Kim river are spill sections. High floods of these rivers are expected to pass over the surface of the road.

The road is motorable throughout the year except during periods of high floods.

R.H.[2] The rest house is two miles away from the junction.
O. D. R.=Other District Roads.
M. D. R.=Main District Roads.
S. H.=State Highways.

Dumas-Surat-Dhulia-Malkapur-Nagpur-Deogadh-Cuttack Road.

State Highway No. 1.

It starts from Dumas and traverses via Surat, throughout the breadth of Surat district, a distance of 61 miles. It passes through the talukas of Chorasi, Palsana, Bardoli, Valod, Vyara and Songadh and then enters Navapur Taluka of West Khandesh District. From Dumas it runs north-east to reach Surat and then runs east with a slight deep in south, till it reaches Kamalchhod, and then north-east upto Songadh, on the boundary of the district.

It touches the following places in the district :—

Dumas	Mile	0	(R.H)
Gavir	,,	3	
Magdala	,,	5	
Piplod	,,	6	
Umera	,,	7	
Athva	,,	8	
Surat	,,	8	R.H.T.B[1]. D.H.
Navagam	,,	14	
Saroli	,,	16	
Kumbharia	,,	17	
Antroli	,,	19	
Kadodra	,,	22	
Bardoli	,,	32	R.H.D.H.
Kamalchhod	,,	41	
Vyara	,,	48	R.H.D.H.
Songadh	,,	60	R.H.D.H.

1 T. B. Travellers Bunglow.

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The following roads either take off from it or are crossed by it :—

Place or point of Junction.	Name of the Road.	Class of the Road
Piplod ...	Piplod-Abhva Road.	O.D.R.
Surat ...	Surat-Olpad-Vadoli Road.	S.H.
	Surat-Ved Road.	O.D.R.
	Surat-Amroli-Phulpara	O.D.R.
	Surat-Dubalwara-Phulpara.	O.D.R.
	Surat-Nana Varachha-Sarthana-Kamrej-Moti Phalod-Kadod Road.	M.D.R.
	Surat-Sachin-Lajpore-Road.	M.D.R.
	Surat-Majura Road.	O.D.R.
Kadodra ...	Bombay-Ahmedabad Road.	N.H.
Mile No. 26. ...	Ena-Tundi-Gangadhara-Mota Road.	O.D.R.
Bardoli ...	Bardoli-Mota Road.	O.D.R.
	Bardoli-Kharvasa-Parona-Sampura Road.	M.D.R.
	Tarsada-Kadod-Bardoli-Sarbhon-Navsari Road.	M.D.R.
	Bardoli-Mahuva-Anval Road.	M.D.R.
	Bardoli-Palsana-Sachin Road.	O.D.R.
	Bardoli-Valod Road.	M.D.R.
Mile No 37 & 38 ...	Bulsar-Dharampur-Bansda-Buhari-Madhi-Mandvi - Zankhvav-Netrang-Rajpipla Bodeli - Godeli-Godhara-Lunavada-Malpur-Modasa Road.	S.H.
Vyara ...	Vyara Station Road.	Municipal Road
	Vyara-Mandvi Road.	O.D.R.
	Kanza-Vyara-Godat Road.	M.D.R.
	Vyara-Kherwada-Umarpada Road.	O.D.R.
	Vyara-Meskatari Road.	M.D.R.
Songadh ..	Songadh-Vajpur-Fatepur Road.	M.D.R.
	Songadh-Otta Road.	M.D.R.
	Songadh-Bandharpada Road.	O.D.R.
	Songadh Station Road.	U.B.

After completion of the work which is under progress, the portion (0 to 13 miles) from Dumas to Surat will have asphalt surface and that from (13 to 33 miles) Surat to Bardoli will be cement concrete road and the rest (i. e. from mile 33 to 61) will be asphalt road.

The road will be motorable throughout the year only after completion of the work and the construction of railway level crossing.

Tithal-Bulsar-Dharampur-Ragbari Peint-Nasik Road.

S. H. No. 2.

This road, which is about 60 miles long in the district, runs east upto Dharampur and then runs south upto Jogwel and after that runs east till it enters Nasik district. During its course in the district it traverses the Talukas of Bulsar and Dharampur. This highway runs on the 'Bombay-Ahmedabad' National Highway for a length of one mile and two furlongs and leaves the national highway at mile 149-3.

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During its course in the district it touches the following places :—

Bulsar	Mile No.	3
Atak Pardi	,, ,,	7
Jujwa	,, ,,	7
Bodlai	,, ,,	9
Bhutsar	,, ,,	11
Kharwel	,, ,,	15
Wankel	,, ,,	17
Dharampur	,, ,,	20 I. B.
Nanakwada	,, ,,	22
Barolia	,, ,,	23
Lakadmal	,, ,,	25
Jogwel	,, ,,	34
Mandva	,, ,,	37
Kaprada	,, ,,	40
Diksal	,, ,,	52
Rajbari	,, ,,	57

The following roads either take off from it or are crossed by it :—

Place or point of junction.	Name of the Road	Class of the Road
Bulsar	Bulsar-Ahmedabad-Delhi Road	N. H.
Jujwa	Jujwa-Barisal Road	O. D. R.
Kharwel	Kharwel-Ojar-Rabra-Porbera Road	M. D. R.
Dharampur	Dharampur-Andha-Bildha Road	M. D. R,
	Japi-Mota ponda-Dharampur-Bansda-Madhi-Mandvi-Zankhavav-Madhi Road	S. H.

It is an all-weather road asphalted only up to Dharampur. The section between Dharampur and the river Par is being asphalted.

Bilimora-Chikhali-Bansda-Waghai-Nasik Road.
S. H. No. 3

The road runs from Bilimora, thirty-six miles east upto the village of Movas on the eastern border of Surat district and enters the Dangs. It traverses the talukas of Chikhali and Bansda. The section between mile 5/6 and 7/6 is common to this and the 'Bombay-Ahmedabad-Delhi' National Highway.

It touches the following places :—

Antalia	Mile No.	2
Wankal	,, ,,	4
Chikhali	,, ,,	6
Thala	,, ,,	7
Alipore	,, ,,	8
Manekpore	,, ,,	10
Rankuva	,, ,,	14
Pratapnagar	,, ,,	17
Lokhaware	,, ,,	20

Valzar	Mile No.	24	
Bhinar	,, ,,	27	
Bansda	,, ,,	28	
Moti Bhamti	,, ,,	30	
Amba Bada	,, ,,	33	
Movas	,, ,,	36	

The following roads either take off from it or are crossed by it :—

Place or point of Junction.	Name of the Road	Class of the Road
Bilimora ...	Bulsar-Bilimora--Gandevi - Navsari - Lajpore-Surat-Rander-Olpad-Vadoli Road.	S.H.
Wankal ...	Wankal-Ourchod Road.	O.D.R.
Chikhali ...	Bombay-Ahmedabad-Delhi Road.	N.H.
Rankuva ...	Tankal-Harangam-Kaliari-Rumla Road.	M.D.R.
Kukeri ...	Baroda-Mahuwa-Anwal-Kukeri Road.	M.D.R.
Mile No. 19 ...	Wander-Vella-Anval Road.	O.D.R.
Valzar ...	Valzar-Limzar Road.	O.D.R.
Bansda ...	Vapi - Mota Pondha-Dharampur-Bansda-Madhi-Mandvi-Zankhvav-Wadi-Modsa Road.	S.H.
	Bansada-Mankhusma-Chorwavi-Anklach Road.	M.D.R.

The first 20 miles of this road are provided with cement concrete surface and the rest are being asphalted.

It is motorable throughout the year.

Vadoli-Kim-Mandvi-Maldha-Umarpada Sagbara Road.
S. H. No. 4

This road starts from Vadoli, runs east, with a deep in south, upto Mandvi, joins the 'Bombay-Ahmedabad- Delhi' National Highway and runs north along it, a distance of about 10 miles, up to Maldha; then runs north-east up to the village Bardi on the northern border of the district ; and enters Broach district in which it terminates at Sagbara. It passes through the talukas of Olpad, Mangrol and Mandvi. The length of the road is 59 miles. This is inclusive of the section that is common to the highway and the Bombay-Ahmedabad-Delhi, National Highway.

It touches the following places :—

Vadoli	Mile No.	1	
Anita	,, ,,	4	
Kim	,, ,,	7	D. H.
Bhatkol	,, ,,	10	
Kamrej	,, ,,	11	
Vahila	,, ,,	13	
Tadkeshwar	,, ,,	16	D. H.
Ushker	,, ,,	19	

Navagam	Mile No.	21	
Areth	,, ,,	25	D.H.
Godsamba	,, ,,	30	
Mandvi	,, ,,	33	D. H. F. B.
Sathav	,, ,,	37	
Fulvadi	,, ,,	40	
Firar	,, ,,	40	
Maldha Navo	,, ,,	43	
Tarapur	,, ,,	44	
Kanjwas	,, ,,	45	
Deogin	,, ,,	46	
Khant	,, ,,	49	
Umarpada	,, ,,	54	
Bardi	,, ,,	59	

The following roads either take off from it or are crossed by it:—

Place or point of Junction	Name of the Road	Class
Kim. Jn. M. No. 7	Bombay-Ahmedabad Road	N.H.No. 8
Tadkeshwar M. No. 16 ...	Tadkeshwar-Nani-Naroli-Mangrol Road.	M.D.R.
Naogma M. No.22..	Naogma-Tuked-Amkhonta Road	O.D.R.
Areth M. No. 25 ..	Areth-Bodhan-Ghala-Karajan-Pardi Road.	O.D.R.
Mile No. 26 ...	Garechhi-Naren-Job-Patal Road.	O.D.R.
Purna M. No. 32 ...	Purna-Un-Kharoli Road.	O.D.R.
Umarpada ..	Umarpada-Vyara Road.	O.D.R.
Mile No. 54 ..	Umarpada-Wadapada-Kosi Road.	O.D.R.

The Road between Vadoli and Mandvi is a cement concrete road. There is Katchha road beyond Kant. The road from Vadoli to Mandvi is motorable throughout the year and from Mandvi to Maldha is a fair weather road.

Bulsar-Bilimora-Gandevi-Navsari Lajpore-Surat-Rander--Olpad Vadoli Road.

S. H. No. 5.

The road starts from Bulsar, runs 14 miles north up to Gandevi and thereafter North-north-west upto Olpad ; and then runs north-east upto the northern border of the district and enters Broach. It runs for about 5 miles, from Bulsar to Dungri, on the 'Bombay-Ahmedabad-Delhi' National Highway. Including these 5 miles the length of the road in the Navsari Division is 32 miles. It passes through the Taluka of Bulsar, Gandevi Peta and the talukas of Navsari, Chorasi, and Olpad.

It crosses both the Surat and the Navsari divisions. The road is not yet fully made. It has certain gaps. In the Navsari Division the mileage starts from Bulsar ; in the Surat Division from Surat to Vadoli ; and the road length between Surat and the boundary of the Navsari division is called 'Surat-Sachin-Lajpore-Navsari' road. (Its description as a 'major district road' is given elsewhere in this chapter).

The account of the road in the Navsari Division is as follows :—

It touches the following places :—

Bulsar	Mile No.		1+
Dungri	"	"	5
Rola	"	"	7
Wasan	"	"	9
Bilimora	"	"	11
Gandevi	"	"	14
Salej	"	"	17
Navsari	"	"	26
Kasba	"	"	28
Ponsra	"	"	31

The following roads either take off from it of are crossed by it :—

Place or point of Junction.	Name of the Road	Class of the road
Bulsar ...	Bombay-Ahmedabad-Delhi National Highway.	N.H.
Dungri ...	Bombay - Ahmedabad-Delhi National Highway.	N.H.
Bilimora ...	Bilimora-Chikhali-Bansda - Waghai-Malegaon-Nasik Road.	S.H.
Gandevi ...	Amalsad-Gandevi-Malegaon-Tankal-Dholikui Road.	M.D.R.
Italwa ...	Dandi-Matwad-Sisodra-Mahuwa-Anavge Road.	M.D.R.
Ponsra ...	Maroli-Umrath Road.	M.D.R.

It crosses Auranga river near Bulsar ; Kharera and Kaveri near Bilimora ; Vangania near Gandevi, Ambica near Salej and Purna near Viraval. Of these the rivers Auranga, Ambica and Purna are bridged. Bridges over the rest are proposed.

The portion between Bilimora and Gandevi is asphalt road and the rest is a *katcha* road.

The account of the road between Surat and the northern boundary of the district is given below:—

Rander	Mile No.		3=	
Jangirpora Talod	"	"	7	
Mesma	"	"	12	D. B.
Mahmedpur	"	"	15	
Bhadol	"	"	19	

The following roads either take off from it or are crossed by it.

\+ Miles are numbered from Bulsar.

= Mileage from Surat.

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Place or point of Junction.	Name of the Road	Class o Road
Surat ...	Surat-Mora-Hajira Road.	O.D.R.
Rander ...	Rander-Dandi-Veluk Road.	O.D.R.
Jangirpura ...	Jangirpura-Variav Road.	O.D.R.
Olpad ...	Olpad-Sayan-Kathor-Kamrej Road.	O.D.R.
	Olpad-Kamrej Road.	O.D.R.
	Olpad-Madroj Road.	O D.R.
Mile No. 29 ...	Vadoli-Kim-Mandvi Road.	S.-H.

It crosses the river Tapi over a bridge known as 'Hope bridge'. It also crosses, Mesma, Sena and Bhadol creeks all of which are bridged.

Section of a mile after the Hope bridge is a spill section, which gets submerged only when the river Tapi is in high floods. The road is usually motorable throughout the year.

Vapi-Motaponda-Dharampur-Bansda-Madhi-Mandvi-Zankhvav-Mosda Road.

S. H. No. 6.

This road starts from Vapi, runs north-east upto Bansda; after that runs north to reach Zankhvav and then north-east upto the northern boarder of the district and enters Broach district. It passes through the talukas of Bulsar, Dharampur, Bansda of the Navsari Division and Vyara, Valod, Bardoli, Mandvi and Mangrol of the Surat Division. The road is about 110 miles long.

It touches the following places :—

Vapi	Mile No.	1
Bhatkarwad	" "	3
Degam	" "	8
Mota Pond	" "	10
Kakadopa	" "	12
Nana Ponda	" "	16
Moti Vahial	" "	18
Nanakwada	" "	24
Dharampur	" "	26
Amba	" "	30
Anklach	" "	32
Vanjarwadi	" "	36
Mandavkhadak	" "	40
Umarkui	" "	44
Gangpur	" "	46
Bansda	" "	50
Bhinar	" "	52
Unai	" "	55
Dolvan [1]	" "	

1. The road was not fully constructed beyond this place.

Going from south to north the following roads either take off from it or are crossed by it :—

Place or point of Junction.	Name of the Road.	Class of the Road
Vapi ...	Bombay-Ahmedabad-Delhi Road.	N.H.
Nona Ponda ...	Pardi-Chival Road.	M.D.R.
Moti Vahial ...	Tithal-Bulsar-Dharampur - Rajbori - Peint -Nasik Road.	S.H.
Dharampur ...	Do.	S.H.
	Dharampur-Andha-Bildha Road.	M.D.R.
Karanvihari ...	Tankal-Harangam-Kaliari Road.	M.D.R.
Ancklach ...	Bansda - Mankhusma - Gorwani - Anklach Road.	M.D.R.
Mandavkhadak ...	Runla-Ghodhal-Mandav-Khadak Road.	O.DR.
Limzar ...	Limzar-Billimora-Chikhli.	O.D.R.
Bansda ...	Bansda-Waghai-Malegaon-Nasik Road.	S.H.
Bhinar ...	Anaval-Bhinar-Sonawari Road.	O.D.R.
Dolvan ...	Dolvan-Mahavaria Road.	O.D.R.
Gadat ...	Vyara-Gadat Road.	M.D.R.
Valod ...	Valod-Vanker-Bardoli Road.	M.D.R.
	Valod-Vedchhi-Ambachha Road.	O.D.R.
Kamalchho ...	Dumas - Surat - Dhulia - Malkapur - Nagpur-Cuttuck.	S.H.
Madhi ...	Madhi-Kadod Road.	M.D.R.
Wanskui ...	Wanskui-Kalamba-Katashwal Road.	O.D.R.
Tarsada ...	Tarsada-Kadod-Bardoli-Sarnhor-Navsari Road.	M.D.R.
	Tarsada-Kakarapada Road.	M.D.R.
Mandvi ...	Vadoli-Kim-Mandvi Road.	O.D.R.
	Maldha-Umarpada-Segbara Road.	S.H.
	Mandvi-Woreth-Dudhawada-Kherwada-Sadadkana-Serula Road.	O.D.R.
Zankhvav ...	Zankhvav-Wankal-Kosamba Road.	M.D.R.

Going from south to north the road crosses the following rivers :—Par, Bamti, Tan, Kaveri, Ambica, Purna, Zankhari, Gabhni, Mindhola, Tapi and Ver. All these rivers are to be

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bridged. At present (1956) some of the bridges are under construction. It also crosses, near Wakla, Wolen creek, which is to be bridged.

The work of improving the road is in progress and when completed the entire road, except for a concrete section of 8 miles between Madhai and Tarsada, will have black surface.

At present the road is motorable in fair season only. It will be motorable throughout the year, when all the rivers are bridged and the road surface is improved.

Songadh-Vajpur-Fatehpur Road.

MAJOR DISTRICT ROADS (M.D.R.)

This road, which is 29 miles long, runs north, with a slight deep in the east, up to Serula, and then north-east up to Fatehpur on the boundary of the district. It passes through Songadh taluka only.

It touches the following places :—

Songadh	Mile	0	R.H.
Bhurvel	,,	4	
Ukai	,,	7	
Serula	,,	9	
Satkeshi	,,	15	
Kosi	,,	25	
Vajpur	,,	29	

The following roads either take off from it or are crossed by it :—

Place or point of Junction	Name of the Road	Class of the Road
Songadh ..	Surat-Dhulia-Malkapur-Magpur-Cuttack Road.	S.H.
	Songadh-Otta Road	M.D.R.
	Songadh-Amba-Parvat-Sejkuva	O.D.R.
	Songadh-Doswada-Zankhari Road.	O.D.R.
	Songadh-Vaghnera Road.	O.D.R.
	Songadh Station Road.	V.R.

The road crosses the river Tapi at mile No. 7. There is no bridge. A ferry plies accross the river. A bridge over the Tapi, near the village Ukai is proposed.

It is a *Katcha* road and the work of its improvement is under progress. At present (i. e. 1956) the road is not motorable throughout the year.

MAJOR DISTRICT ROADS

Songadh-Otta Road.

M.D.R.

This road which is 37 miles long, runs south-east up to Otta on the eastern boundary of the district. It passess through the taluka of Songadh.

It touches the following places:—

Songadh	Mile No. 0	R.H.
Champawadi	„ „ 2	
Sejupada	„ „ 3	
Medsingi	„ „ 4	
Don	„ „ 8	
Jamkhadi	„ „ 9	
Meddha	„ „ 11	
Panlarphali	„ „ 13	
Talpada	„ „ 14	
Lavachhi	„ „ 15	
Chimar	„ „ 17	
Malangdeo	„ „ 27	
Thal	„ „ 32	
Otta	„ „ 37	

The following roads either take off from it or are crossed by it :—

Place or point of Junction	Name of the Road	Class of the Road
Songadh ...	Surat-Dhulia-Malkapur-Nagpur-Cuttack Road.	S.H.
	Songadh-Vangera Road.	O.D.R.
	Songadh-Vajpur-Fatehpur Road.	M.D.R.
	Songadh-Doswada-Zankhari Road.	O.D.R.
	Songadh-Ambach-Parvat-Sejpada Road.	O.D.R.
Mile No. 20	Saber-Navapur Road.	O.D.R.

The section of the first four miles is metalled and the remaining portion is a *katcha* and fair weather road. It crosses the river Zankhari which is bridged. The work of improving the road is in progress and on its completion the road will be motorable throughout the year.

Kanza-Vyara-Gadat Road.

M.D.R.

Starting from Kanza it runs South-south-east a distance of 25 miles upto Gadat on the Vapi-Mota Ponda-Dharampur...... Zankhvav, State Highway No. 6. It passes through Vyara taluka only.

It touches the following places :—

Kanza	Mile No. 0	
Unchamal	„ „ 3	
Sadoran	„ „ 6	
Vyara	„ „ 12	R. H. D. H.
Kanpura	„ „ 15	

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Anagalpur	Mile No.	16
Jesingpur	„ „	21
Gadat	„ „	24

The following roads either take off from it or are crossed by it :—

Place or point of junction	Name of the Road	Class of the Road
Kanza ..	Tarsada-Kakarapara Road.	M.D.R.
Indu ...	Vyara-Kherwada Road.	O.D.R.
Vyara ...	Dumas-Surat-Dhulia-Malkapur-Nagpur-Cuttack Road.	S.H.
	Vyara-Mandvi Road.	O.D.R.
	Vyara-Umarpada Road	O.D.R.
	Vyara-Mesketry Road.	M.D.R.
Gadat ..	Vapi-Mota Ponda-Dharampur-Bansda-Madhi-Mandvi-Zankhvav-Mosda Road.	S.H.

It crosses the rivers Mandvi and Zankhari; both are to be bridged.

It has gravel surface and is motorable in fair season only. Only after the construction of bridges accross the rivers Mandvi and Zankhari, the road will be motorable throughout the year.

Bardcli-Vankaner-Vaod.

M.D.R.

This road, which is about 11 miles long, runs south-west. It traverses the talukas of Bardoli, and Valod, and terminates at Valod which is on S. H. No. 6.

It touches the following places :—

Bardoli	Mile No.	0
Abhva	„ „	2
Vankaner	„ „	5
Valod	„ „	11

The following roads either take off from it or are crossed by it :—

Place or point of junction	Name of the Road	Class of the Road
Bardoli ...	Dumas-Surat-Dhulia-Malkapur-Nagpur-Cuttack Road.	S.H.
	Tarsada-Kadod-Bardoli-Sarbhon-Navsari Road.	M.D.R.
	Bardoli-Mahuva-Anval Road.	M.D.R.

The work of bringing this Katcha road upto the M.D.R. Standard is in progress. At present (1956) the road is motorable in fair season only.

MAJOR DISTRICT ROADS

Olpad-Sayan-Kathor Road.

M.D.R.

This road, which is 14 miles long, runs east with a deep in south. It traverses the Talukas of Olpad and Kamrej and terminates at Kathor, where it meets the 'Bombay-Ahmedabad-Delhi', national highway.

It touches the following places:—

Olpad	Mile	No.	0
Sandhiyar	,,	,,	5
Paria	,,	,,	7
Sayan	,,	,,	9
Velanja	,,	,,	12
Kathor	,,	,,	14

The following roads either take off from it or are crossed by it :—

Place or point of junction	Name of the Road	Class of the Road
Olpad ...	Surat-Rander-Olpad-Vadoli Road.	S.H.
Olpad ...	Olpad-Kamrej Road	O.D.R.
	Olpad-Mandvi Road.	O.D.R.
Kathor ...	Kathor-Utran Road	O.D.R.
	Bombay-Ahmedabad-Delhi Road.	N.H.

Section between Sayan and Kathor (3 miles) is asphalt road and the rest is metalled. At present (1956) the road from Sayan to Kathor is motorable throughout the year, while that from Olpad to Sayan is motorable in fair season only.

Surat-Sachin-Lajpore-Navsari Road.

M.D.R.

It is a part of the state highway No. 5. It starts from Surat and passes through the taluka of Chorasi. From Surat it runs south with a deep in the east upto Waregam on the boundary of the Surat division. The road is about 14 miles long.

It touches the following places :—

Kathodara	Mile	No.	2
Udhana	,,	,,	3
Bhestan	,,	,,	6
Unn	,,	,,	7
Pardi Navi	,,	,,	9
Sachin	,,	,,	10
Lajpore	,,	,,	12
Kapletha	,,	,,	13
Waregam	,,	,,	14

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The following roads either take off from it or are crossed by it :—

Place or point of junction	Name of the Road	Class of the Road
Surat ...	Dumas-Surat-Dhulia-Malkapur-Cuttack	S.H.
Udhana ...	Udhana-Dindoli-Deladwara-Timberwara-Arthanan-Warda-Baleshwar.	O.D.R.
Sachin ...	Sachin-Palsana.	O.D.R.

It crosses Kankara *Khadi* (creek) over a well built R.C.C. bridge completed in 1956, and the river Mindhola over a bridge.

The road has W.B.M[1]. surface. The work of improving the surface and bringing the road upto the State Highway standards is in progress. On its completion of the road, except for the section near Kankara creek, which will be submerged in abdormal floods, will be motorable throughout the year.

Kosamba-Velachha-Mangrol Wahkal-Zankhavav Road.

M.D.R.

From Kosamba to Velachha it runs east with a deep in south, and then north-east from Velachha to Mangrol; thereafter runs east. It traverses the Taluka of Mangrol. The total length of the road is about 28 miles.

It touches the following places :—

Kosamba	Mile No.	0	R.H.
Velachha	„ „	5	R.H.
Simodara	„ „	10	
Wareli	„ „	12	
Mangrol	„ „	19	R.H.
Wankal	„ „	23	
Zankhvav	„ „	28	R.H.

The following roads either take off from it or are crossed by it :—

Place or point of junction	Name of the Road	Class of the Road
Kosamba ...	Kosamba-Kakarwada-Obha Road.	O.D.R.
Mile No. 3 ..	Bombay-Ahmedabad-Delhi Road.	N.H.
Mangrol ...	Tadkesvar-Nani-Naroli-Mangrol Road.	O.D.R.
Sankhvav ...	Bulsar-Dharampur-Bansda-Buhari-Madhi-Mandvi-Zankhvav-Netrung-Mosda	S.H.

1. Water Bound Macadam.

It crosses the river Kim near Simodra and the river Nakti near Godkachha. Both are to be bridged.

Between Kosamba and Zankhvav there is a Katcha cart track. From Mangrol to Zankhvav the work of improving the road is in progress and when completed this section will be motorable throughout the year.

Surat-Nana-Varachha-Sarthana-Kamrej-Moti.

From Surat to Kamrej it runs north-east and thereafter, up to Kadod, runs east and has kinks at Digas and Sampura ; beyond Kadod the road runs south with a deep in east. It traverses through the talukas of Chorasi, Kamrej and Bardoli. The length of the road is 34 miles.

It touches the following places :—

Surat	Mile	No.	0	R.H. D.H.T.B.
Nana Varanchha	„	„	4	
Sarthana	„	„	5	
Laksana	„	„	6	
Navagam	„	„	8	
Kamrej	„	„	10	
Kali-Bharthana	„	„	12	
Netrung	„	„	14	
Digas	„	„	16	
Orna	„	„	17	
Sampura	„	„	20	
Nagod	„	„	24	
Moti Falod	„	„	25	
Kadod	„	„	29	
Sigod	„	„	30	
Orgama	„	„	31	
Bhatlow-moti	„	„	32	
Madhi	„	„	34	

The following roads either take off from it or crossed by it :—

Place or point of junction	Name of the Road	Class of the Road
Laksana ...	Laksana-Vav-Orna Road.	O.D.R.
Kamrej ...	Bombay-Ahmedabad-Delhi.	N.H.
Orna ...	Orna-Shiom-Mota-Bardoli Road.	O.D.R.
	Orna-Vav-Bardoli-Sanpura Road.	O.D.R.
Kadod ...	Tarsada-Kadod-Bardoli-Sarbhon-Navsari Road.	M.D.R.
Orgama ...	Orgama-Warada-Paroda-Mota Road.	O.D.R.
Madhi ...	Bulsar-Dharampur-Madhi-Mandvi	S.H.

It will be an all weather road, after completion of the work of improvement, which is under progress.

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Lavachha-Vapi Road.

A length of 10 miles and 2 furlongs is under Navasari and Dangs Division, P.W.D. and enters Pardi taluka at village Lavachha, and runs north-west. In its course it joins the Bombay-Ahmedabad-Delhi, National Highway, at mile No. 131/4 and bifurcates, at mile No. 132/5, near the railway crossing at Vapi, to go to Daman.

It touches the following places in the Surat district :—

Lavachha	Mile	No.	0
Dungar	,,	,,	1
Chanod	,,	,,	3/4
Soddan	,,	,,	4/2
Koliwada	,,	,,	5/0
Vapi	,,	,,	6/2

Only the State Highway No. 6 viz., Vapi, Mota Ponda......... Zankhvav wadi Moda road meets the road at mile No. 4. It is motorable throughout the year.

Bulsar-Khergam-Dharampur Road.

M.D.R.

The road starts from Bulsar at mile 151/0 of the Bombay-Ahmedabad-Delhi, National Highway ; runs on it from about half a mile and then forks east. It runs from Bulsar, 18½ miles east upto Dharampur, where it terminates.

It touches the following places :—

Bulsar	Mile	No.	0
Dhamdachhi	,,	,,	2
Gundlao	,,	,,	3
Chadoi	,,	,,	4/5
Gorwada	,,	,,	5/3
Fanaswada	,,	,,	6/7
Mull	,,	,,	7/3
Kalwada	,,	,,	8/0
Pitha	,,	,,	9
Khergam	,,	,,	10/2
Nandhai	,,	,,	11/4
Bhabha	,,	,,	13/9
Bamti	,,	,,	16/2
Dharampur	,,	,,	18/5

The following roads either take-off from it or are crossed by it :—

Place or point of junction	Name of the Road	Class of the road
Mile No. 0/4 ...	Bombay-Ahmedabad-Delhi Road	N.H.
Mile No. 8 ...	Segwa-Algam-Sarodhi Road.	O.D.R.
Mile No. 12 ...	Chikhali-Khergam Road.	O.D.R.

The road is motorable throughout the year.

Pardi-Chival-Nanapondha Road.

This road runs from Pardi railway station, 15 miles and two furlongs east up to Nanapondha. It passes through the talukas of Pardi and Dharampur.

It touches the following places :—

Pardi	Mile No.	1-4
Balda	„ „	3-2
Rampur	„ „	4-5
Sukesh	„ „	5-2
Nana Waghchhipa	„ „	6-0
Mota Waghchhipa	„ „	6-4
Panchlai	„ „	7-3
Nevri	„ „	8-5
Dagadmal	„ „	10-0
Chival	„ „	12-5
Nanapondha	„ „	15-2

The following roads either take off from it or are crossed by it :—

Place or point of junction	Name of the road	Class of the road
Mile No. 10 ...	Udwada Railway Station. Paria-Rohi-Dhagadmal Road.	O.D.R.
Mile No. 15 ...	Vapi-Mota ponda-Dharampur-Bansda-Madhi-Mandvi-Zankhvav-Wadi-Mosda Road.	S.H.

The road is motorable throughout the year.

Vesma-Maroli-Umrath Road.

The road forks from the 'Bombay-Ahmedabad-Delhi' National Highway at the village Vesma and runs about 17 miles (16.85 miles) west and terminates at Umrath.

It touches the following places :—

Vesma	Mile No.	0
Dabhel	„ „	3-6

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Simlak	Mile No.	4-2
Vada	" "	4-7
Maroli	" "	5-7
Parsoli	" "	11-3
Umrath	" "	16

The road neither crosses any road, nor any road emanates from it. It is motorable throughout the year.

Tarsadi-Mahuva-Anaval-Kukeri Road.

It starts from Tarsada, runs south a distance of 22 miles upto Kukeri.

It touches the following places :—

Tarsadi	Mile No.	0
Mahuva	" "	4
Umbharat	" "	16
Anaval	" "	22

Mahuva-Nihali road bifurcates from this road on mile No. 4.

The names of the major district roads, less than seven miles long are given below.

(1) Mahuva-Nihali Road.

(2) Tarsada-Kadadara-Bardoli-Sarbhon Road.

(3) Gandevi-Dhamadachha Road.

(4) Navsari-Mahuva road section upto Sisodra to Ughat.

TABLE No. 3

THE TABLE GIVING TALUKAWISE DETAILS ABOUT ROADS IN THE DISTRICT

Sr. No. 1	Name of Road 2	Starting Point 3	Ending Point 4	Metalled length 5	Unmetalled length 6	Total length 7	Important roads which it meets or crosses 8
1	Sisodra Eru Char Road ...	Sisodra	Eru	—	4.00	4.00	Starts from Bombay-Ahmedabad National High-way near Sisodra crosses Jalalpore Salej Ambika Bridge.
2	Navsari Matwad Road ...	Navsari Station	Matwad	5.57	1.13	6.70	Starts from Navsari Station.
3.	Eroo Four Road to Att Road.	Eroo Four Roads.	Att	—	5.00	5.00	—
4.	Road joining Vedchha Station to Amalsad Panar Road via Abrama Kharsad.	Vedchha Station	Amalsad Panar Road	—	4.88	4.88	—
5.	Jamalpore Salej Ambika Bridge Road.	Jamalpore	Salej Ambika Bridge	—	6.69	6.69	Starts from Navsari Municipal limit. Meets Gadat Bileimora P. W. D. Road near Gadat Bridge.
6.	Abrama to Eru Char Road ...	Abrama Dharamsala	Eru Char Road	—	5.37	5.37	Joins Navsari Matwad Road.
7.	Adada to Supa Central School Road.	Adada	Supa Central School	—	4.09	4.09	Starts from Bombay Ahmedabad National Highway. Joins Jamalpore Salej Ambika Bridge Road.
8.	Supa Central Boarding to Nagdhara Kumbhar falia Road.	Supa Central Bldg.	Nagdhara Kumbhar falia Road	—	6.78	6.78	Joins Bombay Ahmedabad Highway.
	Taluka Kamrej—						
1.	Kathor Abrama Sheikhpur Road.	Abrama	Near Sheikhpur	—	7.00	7.00	Starting from M. No. 0/4 of Kathor smashan Road, crossing P. W. D. Sayan Road via Velanja to Sheikhpur.
2.	Dhana Karjan Pardi Road ...	—	—	—	5.04	5.04	Starting from M. No. 31/3 to 31/4 of P. W. D. Navsari Mangrol Road meeting near Dhana village via Karjan.

Sr. No. 1	Name of Road 2	Starting Point 3	Ending Point 4	Metalled length 5	Unmetalled length 6	Total length 7	Important roads which it meets or crosses 8
Taluka Xamrej—(contd).							
3.	Kamrej Orna Vevan Mirapur Road.	Kamrej	Mirapur boundry	—	11 02	11102	Starting from Kamrej reaching upto boundry of Mirapur Mota.
4.	Nansad Morthana Valan Road.	Nansad	Near Valan	—	5 00	5 00	Starting from M. No. 1/4 to 1/5 of Kamrej Orna Sevlan Mirapur meeting near Valan village.
5.	Orna Sampura Nagod Rundhwada Road.	Orna	Rundhwada	—	6.04	6.04	Starts from Oran reaches boundry of Farod of Bardoli Taluka.
6.	Valthan Vadli Morthana Segwa Sevni Vitan Jated Road.	Valthan	Nagod	—	10.04	10.04	Starts from M. No. 22/6, 22/7 of Navsari Kathor Road meets Orna Shampur Nagod, Kanthwada road, near Rundhwada boundry.
7.	Kamrej Dungra Dhatwa Road	Kamrej	Near Dhatwa village	—	4.00	4.00	Starts from M. No. 2/0 of Kamrej Orna Sevni Road meets near Dhatwa village
8.	Vav Pasodra Sarjana Road ...	Vav	Sarjana	—	4.05	4.05	Starts from M. No. 24/5 to 24/6 of Navsari Kathor road (near Vav) meets near Sarthana Gate, meets Kamrej Sarthana Road in M. No. 5/2, 5.
9.	Gamthan Road at Mirapur ...	Mirapur	Towards Gamthan	—	4.05	4.05	Starts from Kamrej Orna, Sevni Mirapur village Road near Mirapur village reaches Gamthan. (The road is made from Hirak Nidhi funds; so falls under village Panchayat and not repaired by Local Board.)
Taluka Mandvi—							
1.	Garedai Wankal Road .	Mandvi village Panchayat limit	Upto Moritha Varekhadi	—	4.04	4.04	
2.	Areth Bahudhan Road ...	From M. No. 22 of Areth	Upto boundry of Bahudan village Panchayat.	—	4. 6	4. 6	

TABLE No 3 (contd)

Taluka Mangrol—						
1. Mangrol Bhilwada Road ...	Mangrol village	Bhilwada	—	4 625	4 625	
2. Velachha Nandav Mahuvej Moti Pardi Branch line Road...	Velachha village	Nandav village	—	6.125	6.125	
3. Molvan Road joining Kim Mandvi Road.	Molvan village	Kim Mandvi Road	—	6.125	6.125	
Taluka Mahuwa—						
1. Mahuwa Ondach Amchak Kurither Nihali Road	Mahuwa	Nihali Crossing	—	5.75	5.75	
2. Butwada Zervavra Road ...	Butwada	Zervavra	—	5.50	5.50	
3. Anaval Lashanpore Orangadia Khumbhkour Road.	Anaval	Kumbhkotar	—	6.0	6.0	
4. Kachal Kerchaiya Sonikui Road	Kachal	Sonikui	—	6.0	6.0	
5. Zanvavra Ghadoi Gopila Tokerwa Road.	Zervavra	Tokarva Khadi	—	4.625	4.625	
6. Zervavra Kharan Tubradi Road	Zervavra	Fulvadi Talav	—	4.375	4.375	
7. Sankar Talapadi Pathron Tarsadi road joining Mahuwa Boria and Tarsadi Road.	Sankartalavdi Talav	Tarsadi	—	4.0	4.0	
Taluka Navsari—						
1. Navsari Vesma Road junction to Vejalpur Sedalpur Kuched Sisodra Road.	Vejalpur Boundry	Ambheti boundry	—	4.75	4.75	Meets Bombay Ahmedabad National Highway.
2. Deswada Shiyalgam Dalki Road joining Maroli Umbhrat Road	Maroli Umbhrat Road Junction	Deswada village boundray	—	4.00	4.00	Joins Maroli Umbhrat Road.
3. Padgha Kalakatha Road ...	Padgha village	Kalakatha village	—	6.625	6.625	This road meets Maroli Vesma Road.
Taluka Pardi—						
1. Udwada Main Road ...	Udwada Station	Udwada Town	4.0	—	4.0	Joining to National Highway No. 8.
2. Bhadakmora Degam Road ...	Degam Town	Lavachha Vapi	4.0	1.24	5.24	Joining to Lavachha road M.D. R.
3. Pardi Paria Road ...	Paria	Pardi	4 27	—	4.27	Joining to N. H. No. 8.
4. Udwada Paria Rohina Road.	Rohina	Udwada	4 0	2.63	6.63	Joining to N. H. No. 8.
5. Chhiri Rata Vapi Koperli Road.	Koperli	Vapi	—	5.62	5.62	Joining to M. D. R.

Sr. No. 1	Name of Road 2	Starting Point 3	Ending Point 4	Metalled length 5	Unmetalled length 6	Total length 7	Important roads which it meets or crosses 8
Taluka Olpad—							
1.	Olpad Sayan Road M. D. R.	Olpad town	Sayan Railway Station	9.87	—	9.87	Sayan Kathor Road.
2.	Olpad Karanj Road O. D. R.	Olpad town	Karanj village	7.25	—	7.25	Mindhi Mirjapore Bhagwa Road.
3.	Rander Kundiana Road O.D.R.	Rander town	Kundiana village	—	8.25	8.25	Kundiana to Dandi Bunder.
4.	Mindhi Mirjapore Bhagwa Road	4/1 Karanj Road	Bhagwa village Road	—	4.34	4.34	Olpad Kamrej Road.
Taluka Vyara—							
1.	Madava Chhindia Balapur Road.	Madava village	Balpur village	—	6.0	6.0	Joining Vyara Bhesakatri road of P. W. D. Madava village.
2.	Katasvan Ghatta Road ...	Katasvan village	Ghhatta village near Ratania village of Mandvi Taluka	—	6.0	6.0	Joining Ratania Tarsadi of Mandvi PWD at Ratania village.
3.	Bhanvadi Khasalpura Road ...	Khusalpura	Bhanvadi	—	4.0	4.0	Joins the Laturia Kaher Borakhadi Road at Loturia.
Taluka Songadh—							
1.	Songadh Ghoda Road ...	Songadh village	Near river of Ghoda village	—	4.5	4.5	
2.	Tokarwa Umarda Road ...	Tokarwa village	Near the river of Umarda village	—	7.0	7.0	Approaches to Songadh Otta Road and joining the road of Dangs district.
P. W. D. Transfer Roads—							
1.	Songadh Otta Road ...	Songadh	Vaghnera	—	8.5	8.5	
2	Songadh Bandharapada Road.	Songadh	Bandharapada	—	7.62	7.62	
Forest Roads—							
1.	Hindla Umarda Road ...	Songadh Otta Road	Umarda	—	4.5	4.5	Approaches to Songadh Otta Road and Umarda Balipada Road.
2.	Umarda Bardipada Road ...	Umarda River	Bardipada boundry	—	4.0	4.0	Approaches to the Dangs Road.
3.	Kharsi Gaikuwa Dhamodi Road	Kharsi	Dhamodi	—	4.0	4.0	

TABLE NO. 3 (*Contd.*)

Taluka Palsana—						
1. Draj Dholikui Road ...	Traj village	Nandida	—	8.5	8.5	At Palsana it crosses Surat Navsari PWD.N.H.W. beyond Nandida it approaches Surat Bardoli Road.
Taluka Bardoli—						
1. Bardoli Valod Road ...	Bardoli Station	Valod Road	9	3.75	12.75	
2. Sarbhon Sejwad Road ...	Sarbhon	Sejwad	—	7.0	7.0	
3. Kadod Balda Road ...	Bardoli Kadod Road.	Balda village	—	4.50	4.50	
4. Hathuka Godtha Algat Jamnia Road.	Hathuka Godtha Algat.	Jamnia	—	7.00	7.00	
Taluka Bulsar—						
1. Bulsar Khergam Road ...	From Railway bridge Chhipwad.	Village site	7.0	4.23	11.23	
2. Tithal Atar Road ...	From mile 2/0 of Bulsar. Tithal Road	Near Tank at Atar	—	4.38	4.38	
Taluka Bansda—						
1. Sitapur Mahuva Kevdi ...	Bifurcates the Bansda Sitapur.	Kevdi Ralway Station.	—	5	5	PWD road Bilimora Waghai approach Mahuwar Kalamba.
2. Bansda Upsal Moti Valzar ...	Bansda Town	Bilimora Waghai Rd.	—	5	5	Upsal-Luirav.
3. Bansda Luirav ...	Bifurcates Bansda Shampura.	Luirav village	—	4	4	Luirav Upsal Luirav Gangpur.
4. Anawal Kadolpada Luirav ...	Incontinuation with road from Anawal.	Joining Bansda Luirav Road.	—	7	7	PWD road Bilimora Waghai. Kandalpada Dholubar.
5. Kamboya Vandervela ...	Bansda Bilimora Road.	Vandervela	—	5	5	Vandervela Loagtraban. Vandervela Pratapnagar.
6. Pratapnagar Vandervela ...	Billimora Waghai Road.	Kamboya Vandervela	—	4	4	Nil.

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OTHER DISTRICT ROADS AND VILLAGE ROADS.

Sr. No. 1	Name of Road 2	Starting Point 3	Ending Point 4	Metalled length 5	Unmetalled length 6	Total length 7	Important roads which it meets or crosses 8
	Taluka Chikhali—						
1.	Chikhali Khergam Road ...	M. No. 166/5 of Bombay Ahmedabad Road.	Khergam village (Joins Bulsar Khergam Road in M. No. 12/1.)	—	9.66	9.66	Roads from villages Amdhara, Pipal Gabhan, Road, Soldhara, meet this road. This road approaches to Dharampure taluka.
2.	Chikhli Fudval Road ...	Starts from Mile 0/7 of Chikhali Khergam Road.	Fudval village	—	7.88	7.88	This road approaches to village of Bansda Taluka.
3.	Surkhai Kharoli Road ...	Mile 14/6 of Billimora Bansda Road.	Joins PWD Road at Anaval.	—	4.73	4.73	This road approaches to Anaval.
4.	Degam Tankal Chasa Road. ...	From Degam village near Rly. crossing.	Mile 4/0 of Rankuwa Tankal Road (In Tankal village.	—	4.81	4.81	This road is useful to Chasa village to come to Main Road *via* Degam village.
5.	Gandevi Dholikuva Road ...	Nogama village	Mile 2/6 of Surkhai Kharoli Road.	—	9.35	9.35	Roads from village Tankalsaraiya Jogwad-Kangwai and Karoli joins this road.
6.	Kaliari Rankuwa Road ...	Kaliari village	13/220 of Burlinora Bansda Road.	—	6 00	6.00	It crosses Chikhli Fudvel Local Board Road and approaches to Rankuwa Railway Station.
7.	Rankuwa Tankal Road ...	Rankuwa Station	Tankal village	—	4.17	4.17	Nil.
8.	Khudvel Pirkhadi to Agasi Road.	Mile 1/4 of Kaliari Rankuwa Road.	Agasi village	—	6.54	6.54	Nil.
	Taluka Chorasi—						
1.	Surat Gaviar Road ...	Surat	Gaviar	4.27	—	4.27	At present the road is in charge of P.W.D., Surat.
2.	Udhana Kharwasa Road ...	Udhana Railway Bridge.	Kharwasa	—	4.250	4.250	
3.	Hope bridge Bhatha Ichhapore.	Surat	Ichhapore	5.75	—	5.75	
4.	Ichhapore Sunvali Road ...	Ichhapore ..	Sunvali	3.50	3.0	6.50	
5.	Majura Gate to Khajod Road.	Surat	Khajod	—	4.50	4.50	

TABLE No. 3 (*contd*)

Taluka Dharampur—						
1. The road from Dharampur to Bhabha.	Dharampur	Bhabha	—	5.4	5.4	Main Road.
2. Asura to Kangvi Road ...	Asura	Kangvi	—	4.0	4.0	App. Road.
3. Balchundi to Bhandar Katch Road.	Balchundi	Bhandarkatch Road	—	4.0	4.0	Cross Road.
4. Nanapondha to Motapondha Road.	Nanapondha	Motapondha	—	8.0	8.0	Main Road.
5. Dharampur Audha Bildha Rd.	Dharampur	Bildha	3.6	22.2	26.0	Main Road.
P.W.D. Transferred Road.						
6. Dharampur Makadban Road.	Dharampur	Makadban	3.4	2.4	6.0	App. Road.
7. Nanapondha Par River Road ...	Nanapondha	Par river	1.0	3.0	4.0	Main Road.
Taluka Gandevi—						
1. Amalsad to Kolwa Mayatalavdi Road.	Amalsad Station	Salej Maya Talavdi Road.	—	4.0	4.0	Meets Navsari Gandevi P.W.D. Road.

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OTHER DISTRICT ROADS AND VILLAGE ROADS

The table given below gives some idea of road mileage under the various municipalities in the district.

TABLE No. 4.

MUNICIPAL ROADS IN SURAT DISTRICT

Name of the Municipality	Type of roads						
	Concrete	Asphalt	Metalled	Un-metalled	Paved	Kacha	Total
	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.
Bilimora ...	1 0		3 0	4 0			8 0
Bansda ...			6 0	0 4			6 4
Rander ...			7 0	1 0			8 0
Dharampur ...			Not	available.			
Vyara ...			1 4	4 0			5 4
Surat ...		18 1	24 1	36 1	8 1		86 4
Bulsar ...	6 1	6 6		1 1			14 0
Navsari ...		6 4	10 2	2 6			19 4
Variav ...			3 0	7 0			10 0
Total ...	7 1	31 3	54 7	56 4	8 1		158 0

The following table gives the number of vehicles plying in the municipal towns of Surat district. The various types of vehicles are divided among five categories distinguished from each other by the nature of the motive power used for their locomotion.

THE FOLLOWING ARE THE STATISICS OF VEHICLES OPERATING IN MUNICIPAL TOWNS IN SURAT DISTRICT

Motor Vehicles ..	1234
Horse-drawn Vehicles ..	760
Ox-drawn Vehicles ..	1265
Bicycles ..	2617
Hand-drawn carts ..	1460

REST HOUSES

The State Government maintains at various places in the district, 'travellers bungalows', 'Inspection bungalows', 'district bungalows' and 'departmental (P.W.D. and forest) bungalows' mainly for the convenience of various officers touring for office purposes. Some of these are also open to public, but preference

REST HOUSES

is always given to Government Officers. These bungalows are usually furnished with cots, fans, crockery, mattresses, tables chairs and other articles. Cooks are also available at some places. A nominal fee is levied on every lodger so as to cover the operating expenses. Certain persons, build public rest houses or what are known as '*Dharmashalas*', through philanthropic motive. No fee is charged for staying in a Dharmashala.

A list of various bungalows in the district is given below:—

Type of Bungalow.	Place.
Inspection Bungalows	Kathor, Dummas, Surat, Vyara, Daswada, Songadh, Madhi, Sachin, Kosamba, Mangrol, Wankal, Zankhvav, Velachha, Navsari, Bilimora, Ahwa, Bansda, Dharampur, Unai, Umrath, and Vapi.
District Bunglow	Olpad.
Forest Bungalow	Mandvi, Balethi, Zankhvav, Khant, Divtan, Sulkhadka, Vajpur, Kasi, Baoli, Arkati, Karod, and Mangal deo.
Travellers Bungalow	Surat.

STATE TRANSPORT

The Government of Bombay decided in 1947 to nationalize motor transport with a view to climinating uneconomic competition and to placing the industry on a sound economic basis and set up statutory public corporation, known as 'The Bombay State Road Transport Corporation' (B.S.R.T.C.).

After the First World War the motor transport industry yielded high profits which coupled with freedom of entry and absence of regulation, attracted a large number of enterprising people, most of whom were small-scale operators owing on an average a bus or two. In order to attract greater patronage rates were often reduced as low as could cover only the 'out of pocket' costs.

Over-crowding was a rule rather than an exception. Breakdowns were quite common. Necessary amenities such as good

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seating accommodation, canteens, waiting rooms and other facilities were never provided. With a view to larger turn-over drivers drove rashly, often endangering the lives of the passengers.

Conditions of service improved a little afer the Motor Vehicles Act was passed (1939). It was realised after independence, that in a welfare, state, social gain rather than private profits should be maximised. This can never be expected from private proprietors guided solely by profit considerations; for very often private profits and social weal are opposed to one another. Hence it was decided in 1947 to nationalize motor transport in Bombay State.

In accordance with this policy motor transport in Surat district was nationalized on February 1, 1953, and has been administered by the Divisional Controller of the Surat Division. It covers the entire Surat district and partly Broach, Dangs and Thana.

The following table indicates the various routes in operation, route mileage, the frequency of 'Up' and 'Down' trips and the average number of passengers travelled per route:—

TABLE No. 5

OPERATIONS OF BOMBAY STATE TRANSPORT-SURAT DIVISION (DECEMBER 1962)

Station 1	Destination 2	Distance Miles. 3	No. of up trips. 4	No. of down trips. 5	Average number of persons travelled per day. 6
1. Bulsar	Navsari	36 0	4	4	650
2 ,,	Dharampur	18.6	6	6	650
3. ,, ..	Vapi	19 4	5	5	680
4 ,,	Pardi ..	8 2	3	3	200
5. ,,	Udwada	16 9	3	3	250
6. ,, ..	Vankal	14 6	1	1	45
7. ,, ..	Khergam ..	11 0	4	4	300
8. ,, ...	Pardi-Chival ..	14.2	2	2	140
9. Udwada town	Udwada stn. ..	3 8	7	7	220
10. Vapi	Udwa	26.0	1	1	65
11. Bilimora town ..	Bilimora stn. ..	1.2	14	14	400
12. ,, ...	Gandevi	4·2	21	21	810

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	1	2	3	4	5	6
13	Bilimora Town ..	Degam	10.7	3	3	160
14.	,, ...	Chikhali	6.4	9	9	425
15.	,, ...	Bansda	30.5	4	4	350
16.	,, ...	Kharoli	18.2	2	2	125
17.	Bansda	Unai	7.9	4	4	170
18.	Bilimora ..	Ahwa	61.3	2	2	260
19	Navapur Town .	Navapur Station ...	1.2	4	4	280
20.	Ahwa ..	Navapur	39.2	2	2	130
21.	Ahwa	Waghai . ..	21.3	1	1	70
22	Nargol	Sanjan	8.3	7	7	320
23.	Sanjan .. .	Udwa	17.7	2	2	170
24.	Nargol ..	Udwa .. .	26.0	1	1	85
25	Nargol .	Bhilad . .	13.0	2	2	95
26	Bhilad	Phansa	7.9	4	4	205
27	Umbargaon town ...	Umbargaon station ..	4.4	9	9	470
28	Surat .	Rander . .	3.2	47	47	2,400
29.	,, .	Kumbharia	4.4	12	12	670
30	,, . .	Ashwanikumar ..	2.3	21	21	1,450
31	,,	Olpad . ..	12.1	8	8	360
32	,, .	Hansot .	33.1	1	1	110
33	,, .. .	Bhagwa . ..	21.6	1	1	75
34	,,	Illav .	24.0	1	1	65
35.	,, .	Kundiana	14.0	2	2	110
36	,, . .	Veluk	10.7	1	1	30
37.	,, ...	Variav .. .	7.3	4	4	135
38.	,, ..	Karanj .. .	19.8	1	1	55
39	,, . .	Barbhodhan .	9.1	1	1	40
40	,, . .	Dihem ...	12.7	2	2	100
41.	,, . .	Kim . .	27.0	1	1	90
42	,,	Ved .	4.1	12	12	200
43	Illav ..	Hansot . ..	12.3	1	1	58
44	Olpad .	Sayan	9.9	2	2	160
45.	Navsari	Surat .	27.5	4	5	815
46.	Surat . ..	Palsana	16.2	1	2	80
47.	,, .	Poonai .. .	26.7	1	1	85
48.	Palsana .	Bardoli ..	9.9	1	2	90
49	Navsari .	Ati	6.4	4	4	155
50	Navsari ..	Chalthan . ..	17.1	2	2	167
51.	,, .. .	Sisodra .. .	3.4	2	2	38
52.	Chalthan	Palsana	5.8	2	2	98
53.	Navsari . .	Satem	11.4	2	2	140
54.	,, ... Via : Palsana ..	Bardoli . ..	21.2	1	1	98
55.	Navsari .. Via : Sarbhon ...	Bardoli	20.5	3	2	265

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1	2	3	4	5	6
56. Navsari . : Mahuwa ..	Bardoli	31.0	1	1	135
57. Navsari	Vyara	39.2	2	2	295
58. ,, .. .	Gandevi	11.8	5	5	400
59. ,,	Tankal . ..	17 0	1	1	75
60. ,,	Amalsad ..	12 9	1	1	65
61. ,, ..	Panar	12 0	2	2	150
62. ,,	Mahuwa .	17.3	1	1	40
63. Panar .	Vedcha . .	6.3	3	3	160
64. Vedcha	Kharsad	4.0	2	2	60
65. Umbrat ..	Maroli	10 6	2	2	95
66. Maroli ..	Vesma	5 9	5	5	295
67. Navsari .	Umbrat ..	18 6	1	1	130
68. ,,	Vesma .	7 2	2	2	70
69. ,, ..	Matwad . ..	9 8	11	11	590
70. ,, ..	Mangrol ..	53.8	1	1	145
71. ,, ...	Anaval	35 2	2	2	270
72. ,, ..	Karchelia ..	21.7	1	1	105
73. Sarbhon .	Bardoli . ..	6 6	1	1	38
74. Navsari ...	Buhari .. .	30 0	1	1	95
75. Vyara	Unai	26 1	2	2	130
76. Navsari	Pooni	12.5	1	1	55

The table given below indieates the number of routes emanting from important places in the district.

TABLE No. 6

BOMBAY STATE TRANSPORT-SURAT DIVISION (DECEMBER 1953).
NUMBER OF ROUTES, DISTANCE, TRIPS AND PASSENGERS.

Station.	No. of routes emanating from	Route distance in miles.	No. of up trips.	No. of down trips.	No. of persons travelled per day.
Bulsar .	7	124.7	26	26	2775
Pardi .	1	14 2	2	2	140
Udwada town ..	1	3 8	7	7	220
Vapi	1	26 0	1	1	65
Bilimora	7	132 5	55	55	2530
Bansda	1	7.9	4	4	170
Navapur town	1	1 2	4	4	280
Ahwa ...	2	60.5	3	3	200
Nargol .	1	8.3	7	7	320
Sanjan .	1	17 7	2	2	170
Nargol .	2	39.0	3	3	180
Bhilad ..	1	7 9	4	4	205
Umbargam .	1	4 4	9	9	470
Surat	17	248 3	117	118	6055
Illav .	1	12 3	1	1	58
Olpad .	1	9.9	2	2	160
Navsari .	22	437 5	51	51	4290
Palsana ..	1	9 9	1	2	90
Chalthan .	1	5 8	2	2	95
Panar .	1	6 3	3	3	160
Vedcha	1	4 0	2	2	60
Umbrat ..	1	10.6	2	2	95
Maroli ...	1	5.9	5	5	295
Sarbhon .	1	6 6	1	1	38
Vyara .	1	20.1	2	2	130
Total ...	76	1225.3	316	318	19251

STATE TRANSPORT

It will be seen from the foregoing tables that in Surat division there were, in December, 1953, as many as 76 routes with a daily average of 1,225.3 route miles and 19,251 passengers.

The largest number of routes emanate from Navsari; next comes Surat; then come Bilimora and Bulsar, with an equal number of routes. From the point of view of total mileage of routes emanating from a town, the first place goes to Navsari, the second to Surat and the third to Bilimora. As regards the total number of passengers travelled, Surat tops the list followed by Navsari and Bulsar.

Head-Quarters, Workshop, Depots and sub-depots

The headquarters of the division is at Bulsar where a workshop is established to repair and maintain the fleet attached to the division. Similarly depots have been established at Bulsar, Surat and Navsari; while Ahwa, Bilimora and Nargol have sub-depots.

Sheds and bus stations.

The position of bus-stations and sheds as on 31st December, 1953, was as follows:—

Bulsar	Bus Station.
Navsari	,,
Surat	,,
Chikhali	,,
Rander	Shed.

All these were temporary structures.

As on 31st December, 1953 the number of buses attached to the Surat division was 90.

Passenger amenities which were hitherto neglected by private operators, are given considerable importance, which is due to a shift in the motive for conducting the operations. The principle now is that social gain, rather than private profits should be maximised. Spacious, well-ventilated and comfortable buses are provided. In additional to reservation facilities a priority list is maintained and unreserved seats are given according to it. Canteen, drinking water, stands and lavatory facilities are provided at important stations. Special bus-services are arranged on occasions like fairs, melas, etc. Extra buses are also provided in case of heavy rush. Every bus is equipped with a first-aid-box.

The present rate of fares, nine pies per mile, is arrived at on the basis of the Corporation's operations throughout the state. In practice, however, the fares are charged on the basis of the stages travelled; a stage consists of four miles; as such the minimum fare is 3 annas. Half rates are charged for children with a minimum of two annas.

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Transport and Communications.

STATE TRANSPORT

A modest beginning in goods transport was made in May 1953, with a fleet of 9 trucks. These are utilised for casual and special contract work only. There are no scheduled services of goods trucks. As a result of the policy of gradual expansion of goods transport, the total number of trucks attached to the Division as on December 31, 1953, was 28.

The Surat division had on December 31, 1953, a large administrative, traffic, technical and maintenance staff. The total strength as on December 31, 1953 was 590. The categorywise figures were:—

Administrative		68
Technical		59
Traffic		358
Maintenance		105
	Total	590

The administrative staff included the Divisional Controller; Divisional satistician; Divisional Auditor; Labour Officer and the entire staff working directly under them. The Staff concerned with traffic consists of the Divisional Traffic Officer; Assistant Traffic Superintendent; Traffic Inspectors; Fuel Inspectors, Traffic Controllers; Drivers; Conductors; Porters and watermen. Under the workshop staff come the Divisional Mechanical Engineer; Divisional Works Superintendent and various artisans.

Method of recruitment.

A Divisional Selection Committee is appointed for selection of staff having a basic pay upto Rs. 100 per month. This committee consists of (1) a Member of the B.S.R.T.C. who is ex-officio chairman (2) The Divisional Controller concerned and (3) The District Superintendent of Police.

For recruitment of staff carrying a basic salary above Rs. 100 and below Rs. 220 per month, a Central Selection Committee has been appointed for the State. The Committee consists of four members, three of whom are Corporation Board Members and the fourth is the Deputy General Manager (Engineering). One of the Corporation Board Members acts as the Chairman.

A service Board, consisting of the members of the Corporation, is set up for recruitment to the cadres of class I and Class II officers, with a minimum monthly salary of Rs. 220 and above.

Ports.

The old Gazetteer (1877) mentions seven ports in Surat district "Surat on the Tapti, Bhagwa on the Sena creek in the Olpad division, Bilimora on the river Ambika, Navsari on the river Purna, Bulsar on the river Auranga, Umarsari on the river Par and Kolak

on the river Kolak, in the Pardi Sub-division". The estimated value of trade in 1874 at these ports was as shown in the following table.

TABLE No. 7

"ESTIMATED VALUE (IN POUNDS) OF TRADE AT EACH OF THE SEVEN PORTS OF SURAT IN 1874."

Name of the port.	Import £	Export £	Total £
Surat	32,902	2,40,339	2,73,241
Billimora	25,858	98,645	1,24,503
Bulsar	6,268	78,637	84,905
Umarsari	1,679	12,772	14,451
Navsari	2,531	9,788	12,319
Kolak	1,255	3,232	4,487
Bhagwa	12	1,229	1,241

During the year 1874-75, 1533 vessels of an average burden of 18.53 tons visited the port of Surat, while 2065 vessels of an average burden of 18.75 tons visited Bulsar. The following table, taken from the old Gazetteer shows the number and tonnage of vessels trading to Surat and Bulsar.

TABLE No. 8

Ports.		SURAT Vessels arrived at			Vessels departed from.		
No.	Names.	No.	Tonnage	Av. size in tons.	No.	Tonnage	Av. size in tons.
1.	Karachi	7	262	37.42	8	288	36
1.	Cutch Port (Mandvi).	1	40	40	9	116	18.44
9.	Kathiwar Ports ..	294	5,801	19.73	382	5,383	14.09
13.	Gujarat Ports ...	637	10,492	16.47	767	9,507	12.39
1.	Bombay	299	7,788	26.04	188	3,678	19.56
19.	Konkan Ports ...	267	3,220	12.05	247	2,907	11.76
3.	Portuguese Port (Div. Dam and Goa)	18	339	18.83	24	223	9.29
1.	Calicut	10	465	46.5	3	128	42.66
438	Total ...	1,533	28,407	18.53	1,628	22,280	13.68

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Transport and Communications.

PORTS.

TABLE No. 9

BULSAR

Ports		Vessels arrived at			Vessels departed from		
No.	Names.	No.	Tonnage	Av.size in tons	No.	Tonnage	Av. size in tons.
1	Karachi	5	122	24. 4	6	170	28.23
5	Cutch Ports ...	29	1,139	39.27	70	2,697	38.52
19	Kathiawar Ports ..	791	14,889	18.82	609	13,334	21.89
16	Gujarat Ports ..	719	9,977	13.87	700	9,664	13.80
1	Bombay	260	6,816	26.21	220	5,099	23 77
21	Konkan Ports ..	153	2,112	13.80	186	3,838	20.63
2	Portuguese Ports .	39	539	13,82	173	2,223	12.84
1	Calicut	69	3,078	44. 6	64	3,062	47.84
66	Total ...	2,065	38,672	18.72	2,028	40,087	19.76

The chief articles of export (in 1876) were grains, pulses, the fruit of the Mahura tree (Bassia latifolia), timber and bamboos. Of imports the chief was rice in husk, from Konkan; other articles were stone from Porbunder, tobacco from Cambay, cotton from Broach, iron from Bombay, coconuts from Goa and fish from Bombay, Daman and Div.

During the days of Mussalman rulers and later on of the East India Company, the district of Surat had trade connections with foreign ports. After 1800, however, foreign commerce continuously declined. The French possessions in Surat, were seized by the English. The Dutch trade had completely ceased by 1825. The Portuguese trade, though it did not cease, became negligible.

At present (1957) there are seven ports in the Surat district. Surat on the Tapti, Bulsar on the river Auranga, Bilimora on the river Ambika, Navsari and Matwad on the rivier Purna, Umarsadi on the mouth of the river Par, and Bhagwa in Olpad taluka on the river Par.

The Port Umarsadi is the nearest (1 mile) from the open sea, while the port of Navsari is the farthest (14 miles) from the open sea. Distances in miles, of other ports from the open sea are: Surat 10, Bulsar 5, Bilimora 12, Matwad 9 and Bhagwa 3.

The port Surat is administered and controlled by the Range Officer, Surat; Inspecting Authority Superintendent, Central Excise, Surat; Assistant Collector, Central Excise, Baroda; Collector of Central Excise, Bombay. The remaining ports are administered and controlled by the Assistant Range Officer, Inspecting Authority Superintendent, Central Excise, Baroda, and Collector of Central Excise, Bombay.

CHAPTER 9.

Transport and Communications.

PORTS

Main items of import are: sugar, cement, iron, steel, wet dates, ghee, manglore tiles; those of exports are wood, timber, pulses. The following table gives, portwise tonnage of exports and emports for the years 1950-51, 1951-52 and 1952-53.

Annual tonnage of exports and imports at ports of Surat district during the period 1950-53.

Name of the port.	Imports.			Exports.		
	1950-51	1951-52	1952-53	1950-51	1951-52	1952-53
Surat	11,239	39,087	17,687	2,928	3,107	6,198
Bulsar	—	—	—	—	—	—
Bilimora	N.A.	8,157	9,547	N.A.	21,619	14,479
Navsari	—	—	—	—	—	—
Matwad	—	—	—	—	—	—
Umarsadi	1,475	1,465	1,542	785	1,288	1,500
Bhagwa	—	—	—	—	—	—

Sources of import are Saurashtra Ports, Manglore, Bombay and Dahanu, and exports go to Saurashtra ports, Bombay and Ratnagiri. Proximity of these ports to railway stations is a factor that explains the general decline as compared with the past, in the total tonnage of exports and imports. The distance between the port and the nearest railway station, is three miles in the case of Surat, two miles in the case of Bulsar and Bilimora, and seven, ten, three and eighteen miles respectively in the case of Navsari, Matwad, Umarsadi and Bhagwa.

Post Offices.

The Indian Post and Telegraph Department maintains a Postal Division of Surat. This division mostly comprises the Surat district. The table given below gives the talukawise, category-wise distribution of post offices.

FERRIES

The following is a list of ferries under the District Local Board, Surat.

TABLE No. 10.

A LIST OF FERRIES IN THE DISTRICT IN CHARGE OF THE DISTRICT LOCAL BOARD, SURAT.

S. No.	Location of the ferry		Ferry runs in monsoon or during a Year.		Utility of ferry	Size of the ferry	Average income of the ferry in a year,
	Name of the Village	Name of the river	Perennial	Seasonal			
1	2	3	4a	4b	5	6	7
	Mahuwa taluka						
1.	Kavitha	Purna	—	Seasonal	25 persons per day	24×6-6×2-6	Rs. 17
2.	Vehval	Ambika	Perennial	—	45 Do.	26×6-6×2-6	Rs. 19
3.	Kakaria	Ambika	—	Seasonal	35 Do.	24×6-6×2-3	Rs. 15
4.	Anaval	Kaveri	—	Do.	20 Do.	24×6-6×2-6	Rs. 11
	Mandvi taluka						
1.	Kosadi	Tapi	Perennial	—	Carrying (1) Passengers &(2) goods	24-0×6-6×3-0	Rs. 2,000
2.	Baudhan	Tapi	Perennial	—	Do.	Do.	Rs. 300
	Pardi taluka						
1.	Umarsadi	Par	Perennial	—	Carrying 12 Passengers 36 B.Md. goods	23×4-9×1-4	Rs. 970
2.	Namdha	Damanganga	Perennial	—	Do.	23×4-9×1-4	Rs. 1,940
	Vyara taluka						
1.	Ghat ..	Zankhri	—	Seasonal	80 to 90 Persons per day.	24-0×6-6×6-0	Nil. The Board spends Rs. 60 per year to ply the ferry.

TABLE No 10 (*Contd.*)

2.	Malotha	Zankhri	—	Do	Do.	Do.	Do
3.	Bedchit	Purna	—	Do.	Do.	Do.	Do.
4.	Antapur	Purna	—	Do.	Do.	Do	Do.
5.	Chunavadi	Ambika	—	Do	Do.	Do.	Do.
6.	Pathakwadi	Ambika	—	Do.	Do.	Do.	Do.
	Songadh taluka						
1.	Ukai & Bavli	Tapti	Perennial	—	7,200 persons. 450 Bullock Carts per year.	39-0 × 18-0 × 6-6	Rs. 32
2.	Wadi Bhensrot	Tapti	Perennial	—	4,000 persons	24-0 × 6-6 × 3-0	Rs. 29
3.	Waghnera Junai Ovara	Tapti	Perennial	—	3,500 persons	24-0 × 6-6 × 3-0	Rs. 19

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Transport and Communications.

POST OFFICES

TABLE No. 11

TABLE SHOWING TALUKA-WISE DISTRIBUTION AND LOCATION OF POST OFFICES IN THE DISTRICT

Name of the Taluka.	Head Office.	Combined Office.	Sub-Office.	Branch Office.
1. Navsari ...		Navsari Dabhel Jalalpore Maroli Bazar Navsari	Navsari Malesar Abrame Malesar Navsari RS Vesma.	Borifalia Chilgam Kalthan Kanera Kharsad Onjal Panar Sultanpur Dambher Mandir Vedchha Att Bodali Dandi Eru Hansapur Karadi Kothamdi Machhad Matvad Pethan Samapur Vejalpur Bhinar Borsi Chhinam Banti Dalvada-Vadoli Mangrol Maroli Parujan Ponsra Simalgam Umrat Adada Ambada Amlikasba Chovisi Gurukulsupa Italva Kaliavadi Kasbapar Khadsupa Manekpore Takol Munsad Nagdhara Sarpore Pardi Satem Sisodra Supa Kurel Tavdi Ugat Veraval Arak Sisodra Dhaman Kuched Sandalpur.
2. Chorasi . .	Surat (City Head Office)		Surat City Surat RS Jhampa	

TABLE No. 11 *(Contd)*

Name of the Taluka.	Head Office.	Combined Office.	Sub-Office.	Branch Office.
	Surat	Dumas	Muglisara	
		Kakrapar	Gopipura	
		Rander	Bhavanivad	
		Variav	Bhagal	Abhva
			Rustompura	Adajan
			Savadpura	Amroli
			Athwa Lines	Athwa
			Sagrampura	Bhatha
			Salabatpura	Bhatpur
			Aganovad	Bhestan
			KatargamED	Damka
			Sachin	Deladva
				Dindoli
				Eklera
				Fulpada
				Hajira
				Ichhapur
				Khajod
				Kharvasa
				Kosad
				Kumbharia
				Magdalla
				Mohni
				Mora
				Mota Vara-chha
				Navagam
				Palbhatha
				Puna Kumbharia
				Sania Hemad
				Siganpore
				Suvali
				Udhna RS
				Umra
				Utran P.HC.
				Varachhli.
				Vesu
				Bhimpore
				Bhesan
				Kafleta
				Kansad
				Lachhpur
				Talangpur
				Vanz.
3. Chikhali...		Chikhali		Alipur
				Chapaldhara
				Chasa
				Degam
				Donja
				Harangam
				Jogvad
				Kharoli
				Surkhai
				Kulkeri
				Tankala
				Vanjhna
				Vankal
				Amdhara
				Bamanvel
				Fadvel
				Ghej
				Mandav
				Khadak
				Ond

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POST OFFICES

TABLE No. 11 (Contd.)

Name of the Taluka	Head Office	Combined Office	Sub-Office	Branch Office
				Pipalgabhan Sadadvel Sadakpore
		Khergam	Rankuva	Smroli Saravni Talavchora Tejlav Vandervella Nogama Godthal Panikhadak Rumla
4. Gandevi		Gandevi Amalsad Bilimora	Bilimora RS	Ancheli Devdha Dhamdachha Ichhapore Kachholi Kalamtha Kolva Kotha Lusvada Masa Medhar Salej Taliara Vegam Bighri Desra Khaparvada Sardesa-Factory Undach Vaghrech Ambheta Devsar Dhanori Endhal Gadat Gandeva Khvada Khaparia Sonvadi
5. Bulsar ...		Bulsar	Bulsar RS Bulsar Bulsar RS Dungri	Atgam Atul P. C. Bhadeli Bhadeli Jagalala Bulsar--Abrama Bulsar--Kosamba Bulsar-Vankal Chanvai Chharvada Faldhara Ghadoi Hanuman-Bhagda Haler Kalvada Lilapur Parnera Parnera Pardi Ronvel

TABLE No. 11 (Contd.)

Name of the Taluka	Head Office	Combined Office	Sub-Office.	Branch Office
				Tithal Dharasana Gorgam Malvan Untdi Vaghaldhara Bhagod. Haria Magod
6. Olpad ...		Kim	Olpad Savan	Anita Bhagva Karanj Kundianan Mor Saras Barbodhan Dehen Pinjrat Atodra Gothan Karamla Paria Sandhier Svadla Vihara Sonak
7. Pardi ...		Killa-Pardi	Udvada RS Udvada	Pardi RS Sonvada Umarsadi Vaghchhipa Kolak Ambach Bagvada Dungri-- Udvada Goima Palsana Pardi Pardi Paria Rohina Tukvada Koparli Lavachha Salvav Vatar
8. Bardoli ..		Bardoli Bardoli Sardar-Bag (Bardoli) Kadod Madhi		Afva Isroli Nizar Sarbhon Tarbhon Vadoli Vankaner Khojpardi Mota Umrakh Varad Bamni Singod Akoti Balda
9. Kamrej		Kathor(PCO)	Kamrej Kamrej Kholvad	Dhoranpardi Digas Ghala Khthodra Vav-Kathodra

CHAPTER 9.

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POST OFFICES

TABLE No. 11 (contd.)

Name of the Taluka.	Head Office	Combined Office.	Sub-Office.	Branch Office.
				Kosmada
				Umbhel
				Asta
				Haldharu
				Orna
				Sampura
				Shivni
				Timba
				Vihan
10. Palsana ...			Palsana	Chalthan
				Niol
				Bagumra
				GangadhraRS
				Tundi
				Vanesa-Pisad
				Baleshvar
				Ena
				Manekpore
				Ambheti
				Puni
11. Valod ..		Vapi	Valod	Shikai
				Kaher
				Svadla
				Bajipura
				Buhari
				Degama
				Hathuka
				Kalakva
				Vedchhi
12. Mangrol.			Motamia-Mangrol.	Motamia-Mangrol RS
				Nani Naroli
				Pipodra
				Hathuran
				Simodra
				Umarpada
				Vankal
				Velachha
13. Dharampur			Dharampur	Bilpudi
			Dharampur	Nani Vahival
				Ambheti-Sukhala
				Mota Pondha
14. Mahuva			Mahuva-N	Amchak
				Karchelia
				Anaval
				Vaheval
				Zervavla
15. Bansda .	Bansda			Bhinar
	Bansda			Digondranagr
				Partapnagar-(Bansada)
				Unai
16. Mandvi	Mandvi		Bodhan	Godsamba
			Tadkeshwar	Tarsada
17. Songadh...		Fort Songadh	Fort Songadh	Raniamba
18. Vyara ...			Vyara	Dolvan
				Kapura

POST OFFICES

POST OFFICES

Talukas.	Type of Post Offices. H. O.	C. O.	S. O.	B. O.	Total.
Navsari ..		5	6	57	68
Olpad ..		1	2	17	20
Palsana ..		—	1	11	12
Pardi ...		2	1	17	20
Valod ..		1	1	9	11
Vyara ..			1	2	3
Mangrol ..		—	1	8	9
Kamrej ..		2	2	14	18
Bansda ..		1	-	4	5
Chikhli ..		2	1	30	33
Chorasi ...	2	4	15	40	61
Dharampur ..		—	2	4	6
Bulsar ...		1	4	27	32
Gandevi ..		3	1	29	33
Bardoli ...		5	—	14	19
Mankuva ..		—	1	5	6
Mandvi ...		1	2	2	5
Songadh ..		1	1	1	3
Total ..	2*	29	42	291	364

All these Post Offices viz. H.O., S.O., C.O., and B.O. sell postage stamps, post-cards and envelopes, and receive and issue money orders. Savings facilities at the Head Offices and Sub-Offices are offered to the public. A combined office (C.O.) combines normal postal services with telegraph services. The Head Office at Surat is the main distributing centre, through which mails are distributed to the post offices. A branch post office through which mails are delivered either daily or periodically serves a particular area around the village in which it is located.

Telephone exchange :

TELEPHONES.

The first exchange, with 100 lines and 64 connections, operating on the semi Central Battery System and working on primary cells, was opened in 1924. A '200 lines Central Battery non-multiple Board' was installed in 1928 and was extended to '300 lines Central Battery Multiple Board' in 1936. It was gradually expanded by 1953, to 840 lines.

*of these one is city Head Office.

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Transport and Communications.

The first 'Trunk Board' was installed in 1932 and five years later two more were added.

In 1953 the exchange was manned by 77 persons. There is a carrier repeater station equipped with 1 'carrier terminal equipment' and 15 repeaters between Bombay and Surat.

The power supply, for the working of the exchange, is derived from two secondary batteries of 450 and 404 A.H. capacity. The carrier system works on electric supply; in case the electric supply fails it can work on a diesel generator.

Radios.

Radio sets have been used since the early thirties. In 1953 the total number of licenses issued stood at 8,821.

CHAPTER 10—MISCELLANEOUS OCCUPATIONS

CHAPTER 10.

Miscellaneous Occupations.

INTRODUCTION

THE PREVIOUS CHAPTERS HAVE GIVEN AN ACCOUNT of the principal sectors of the economy of the district in which a major portion of the working population is engaged. They do not, however, exhaust the whole field of economic activity and a considerable percentage of working population is still left unaccounted. The total population of the district was of 18,27,842 persons in 1951. The census included 11,17,900 (about 61.2 percent) of them in agricultural classes and the remaining 7,09,942 (about 38.8 percent) in non-agricultural classes. Of 7,09,942 in non-agricultural classes, 2,72,321 (14.9 percent of the total population) were engaged in "other services and miscellaneous sources". The population of Surat city was 2,23,182 in 1951. Of this, as many as 2,21,235 persons (about 99.1 percent) were in non-agricultural classes. Of them again, 60,281 persons (about 27 percent of the total city population) were dependent for their livelihood on "Other sevices and miscellaneous source." These services and sources are those which do not come under the organised sectors of the economy such as agriculture, industry, trade, transport etc. They include, among others, chiefly Health, Education and Public Administration services, Legal services, Religions services, Domestic services, Laundries, Hotels and Restaurants, Hair Cutting Saloons etc. An attempt has been made in this chapter to give a broad account of these important services along with certain other selected occupations such as those of goldsmiths, coppersmiths, tailors, dyeing and printing, flour mills etc. Such an account is rather difficult to furnish, but is valuable and helps to get a clearer picture of the economic set-up, particularly in the urban areas.

SAMPLE SURVEY

A sample survey of the following selected occupations was conducted in Surat city in 1957 with a view to presenting a broad

CHAPTER 10.

Miscellaneous Occupations.

SAMPLE SURVEY

picture of the economic condition prevailing there. In most of the occupations eight to ten percent of the total establishments were selected for the survey. Samples were taken from different localities and were fairly representative of the different sizes and types though no attempt was made to conduct a detailed examination of the problems of each occupation. The occupations selected were :-

(1) Bakeries, (2) Boarding and Lodging Houses, (3) Cap-making, (4) Cold drink houses, including preparations of aerated water, (5) Copper and brass smiths, (6) Flour mills, (7) Gold-smiths, (8) Hair cutting saloons, (9) Laundries, (10) Mattresses and pillow making, (11) Motor building and repairing, (12) Pounding and parching of grains, rice etc,. (13) Printing and dyeing. (14) Restaurants and tea shops and (15) Tailoring. Many of these occupations are a combination of trade and industry. They are chiefly to be found in urban areas of the district, although some of them are met with even in rural parts of the district. (See Table No. 3).

The information collected from last three or four censuses and the sample survey conducted in 1957 showed that the occupations which attracted increasingly larger number of persons were the learned professions like education, law and medicine, administrative services and occupations such as restaurants and tea shops, hair-cutting saloons and tailoring.

Tables giving occupational figures for the last three or four censuses have been inserted wherever found necessary so as to offer some comparative data. But, while comparing previous census figures with the 1951 census figures, an allowance must be made for the territorial expansion of the district after the integration with it of the territory of some of the former Indian States effected in 1949. At the time of the 1951 census, Surat district consisted of the area of the former Surat district of Bombay State (except for 2 villages transferred to Nasik district and 3 villages transferred to Dangs district), with the addition of the former Indian States of Bansda, Sachin and Dharampur,

Navsari district of the former Baroda State, twenty-four villages of Broach district and four villages of Dangs district.

ARTS, LETTERS AND SCIENCE.

Persons included in the group of "arts, letters and science" belong to various smaller groups which are quite distinct from one another. They are authors, journalists, sculptors, architects, photographers, actors, dancers, musicians, singers, engineers, artists, astrologers, image-makers, and scientists. The following table gives the number of persons following various occupations of this class, as their principal means of livelihood :—

TABLE No. 1

NUMBER OF PERSONS ENGAGED IN ARTS, LETTERS AND SCIENCE

Occupation	Year				Year			
	1911		1921		1931		1951 +	
	Men	Women	Men	Women	Men	Women	Men	Women
1. Public scribes and stenographers ...	—	—	1	—	10	—	—	—
2. Architects, surveyors, engineers and their employees.	220	6	165	17	55	—	47	—
3. Authors, photographers, artists, sculptors, astronomers, astrologers, botanists, editors and journalists.	66	3	131	1	82	—	238	4
4. Musicians, singers, actors and dancers	338	77	146	6	96	—	574*	90*
Total ...	624	86	443	24	243	—	859	94

+Occupational figures for 1941 are not available in the census.

*These figures include all workers engaged in cinemas and other recreation services.

ARTS, LETTERS AND SCIENCE

As the table indicates, the number of persons engaged in these services was abnormally low in the year 1931. This may partly be ascribed to the change in the occupational classification adopted since, the 1931 census. The number of architects, engineers etc., as shown in the years 1911 and 1921 include those employed in Government services as well as those engaged independently or employed privately. The 1931 census, on the other hand, excludes those employed in Government services and records only those who are either independently engaged or employed in private concerns. The same pattern is adopted in the subsequent census.

BAKERIES

Surat is well-known throughout the district for its bakery products such as biscuits, bread, cakes and *'nan-khatais'*. At the time of the survey there were 55 bakery-shops (including manufacturing units in Surat engaging a total of 103 persons.Most of them were small in size, each engaging two to four persons. There were, however. a few engaging as many as six to eight persons. In most of the units the employers themselves took part in the day-to-day work. The employed persons were mostly male adults and they had to work for eight to ten hours a day. The employment provided was full time throughout the year.

The equipment of the manufacturing units consisted of an oven with its accessory equipment such as metal moulds vessels, cup-boards etc. The cost of the equipment varied from about Rs. 300, in case of small units to about Rs. 1,500, in case of larger units. Most of the bakeries were housed in rented building and rent ranged from Rs. 15 to Rs. 50 per month.

The samples selected for survey were fairly representative of the small, the medium and the large units. The smallest units survyed employed only one worker while the largest one employed six persons. The principles of division of labour was observed to a certain extent. Work requiring skill and experience was entrusted to more experienced workers while the rest was done by others. The salary paid to an individual employee varied from Rs. 30 to Rs. 150 per month according to his skill and experience of work.

The raw materials required were wheat-flour, sugar, ghee, yeast, fuel etc. and they were purchased from the local markets on wholesale basis. The cost of the raw materials varied from Rs. 200 to Rs. 400 per month in case of small units and from Rs. 1,500 to Rs. 2,000 per month in case of larger units. It was calculated that fuel charges formed nearly 20% of the total cost of the raw materials. The bakeries sold their products to the hotels and restaurants on wholesale basis and to direct consumers on retail basis.

The value of the daily output of an individual unit ranged from Rs. 10 to Rs. 100 according to the size of the unit concerned. It was found that small sized bakeries earned a net profit of about Rs. 120 per month while the larger bakeries earned about

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Miscellaneous Occupations.

Rs. 500 a month. The bakeries catered to no particular class of customers and they had, more or less, a fixed demand through out the year.

BOARDING AND LODGING HOUSES

Most of the boarding and lodging houses in the district were situated at the important commercial centres of the district such as Surat, Bulsar, and Navsari. People from the surrounding areas who had to visit on business these centres, off and on usually preferred to stay at the lodging and boarding houses. In Surat, at the time of our survey, there were 38 such establishments which provided full time employment to more than 300 persons. Some of them provided facilities for both boarding and lodging while others provided only boarding facilities. The boarding houses were generally small units employing 2 to 4 persons. The boarding-cum-lodging houses provided employment to a larger number.

The equipment consisted of wooden planks, tables, chairs, utencils etc. The lodging houses had also to purchase cots, mattresses, pillow, blankets, etc. The cost of the equipment varied from Rs. 1,000 to Rs. 2,500 in case of boarding houses and from Rs.2,000 to Rs.5,000 in case of boarding-and-lodging houses. Most of the establishments were housed in rented buildings and the rent varied between Rs. 30 and Rs. 100 per month according to the total area occupied. The boarding and lodging houses usually occupied larger premises and hence their rents were comparatively higher.

The boarding and lodging houses or residential hotels generally supplied tea or coffee twice a day besides providing lunch and dinner. The boarding houses, on the other hand, merely provided two meals daily. The boarding houses had two types of customers: (1) regular members, (2) casual customers. The regular members were charged on monthly basis while the casual customers. were charged on daily basis. The charges were as follows:

(*i*) Monthly charges: (two meals daily): Between Rs. 30 and Rs. 45.

(*ii*) Daily charges: As 10 to Re. 1 (per meal)

Customers in boarding and lodging houses were generally charged on daily basis as most of them usually stayed there only for a couple of days. The charges varied between Rs. 2 and Rs. 5 a day according to the amenities and conveniences provided.

The day-to-day work was divided into four broad categories:-management, cooking, serving and cleaning. The salaries paid were as follows:

managers between Rs. 50 and Rs. 75 per month, cooks between Rs. 35 and Rs. 60 per month, servers between Rs. 20 and Rs. 30 per month, cleaners between Rs. 15 and Rs. 25 per month.

Besides money wages the employees were provided with free meals lodging etc.

BOARDING AND LODGING HOUSES

The raw materials required included wheat, rice, pulses, vegetables, spices, edible oils, and ghee. They were purchased from the local markets on wholesale basis. The monthly cost of the raw materials ranged from about Rs. 400 in case of small establishments to more than Rs. 2,000 in case of larger establishments. Edible oils figured prominently among raw materials.

The owners of the boarding houses earned between Rs. 100 and Rs. 250 per month while those of the boarding and lodging houses earned between Rs. 200 and Rs. 400 per month. For some it was a business just affording a living; for others it was one earning good profits.

CAP MAKING

The fashion now prevailing in urban areas particularly among large sections of the younger generation of discarding any kind of head dress has not spread much into the interior and hence the few cap making establishments in the district were found to have a brisk demand for their products throughout the year. At the time of our survey there were 45 cap making establishemnets in Surat providing full time employment to 155 persons. Each units had on an average only three or four employees on its pay-roll but it provided part time work to dozens of other workers. One cap mart, as the sample survey shows, provided part time work to about 100 workers every year. The remuneration to such workers was paid on piece wage system. They worked at their own places in their own leisure hours. This was possible as there was a proper division of labour and each worker had to do only a part of the whole work. Such work consisted of embroidering, designing, etc. Most of the workers working on piece wage system were female workers.

Sewing machines, scissors, tapes, needles, tables, cup-boards constituted etc. the necessary equipment and their cost varied between Rs. 700 and Rs. 2,500. Sewing machines were purchased from Bombay at prices varying between Rs. 300 and Rs. 500 according to the quality or make of the machine. Each machine lasted for about 12 years. Most of the establishemnts were housed in rented premises and their rent ranged from Rs. 15 to Rs. 75 varying according to the size of the unit.

The samples selected for survey showed that in each of them nearly 50 per cent of the total staff consisted of near relatives or family members of the employer. Only skilled and experienced workers were taken up as full-time workers and were paid a monthly salary of between Rs. 50 and Rs. 65. No female worker was employed as a full time worker.

The materials required for cap-making included cloth, thin leather, thread etc. The cost of the raw materials varied from Rs. 600 to Rs. 5,000 a month according to the total turnover.

The finished products were sold to wholesale or retail dealers both inside and outside the district. Some varieties of caps were

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sold even in the distant areas of the Uttar Pradesh and Rajasthan. The owners had a brisk business throughout the year and an average unit earned about Rs. 300 every month.

COLD DRINK HOUSES INCLUDING MANUFACTURE OF AERATED WATERS.

Though there were many establishments known as cold drink houses where cold drinks and aerated waters were served to customers, there were only a few which manufactured aeratred waters like Soda water and lemonade. There were 15 such establishments in Surat engaging a total of 68 persons. Most of the cold drink houses were of small size, each engaging three to five persons.

The samples selected for survey were representative of the small, the medium and the big establishments which manufactured soda water. The small units employed no outside worker. The owners themselves carried on the business with the help of their family members. The medium size units employed four workers each while the units representing the big establishments maintained a staff of about 10 persons each.

Their equipment consisted of machines preparing soda water, gas cylinders, pumps, soda bottles, glasses etc. The cost of the equipment varied between Rs. 200 in case of small units and as much as Rs. 10,000 in case of big units. One of the samples representing the small units was housed in a tiny room and its rent was less than Rs. 5 per month. It had a monthly turnover of Rs. 200 only ; but, as the owner did not employ any paid worker he could easily earn about Rs. 100 a month. The larger units, on the other hand, usually had spacious accommodation and in some the rent was as high as Rs. 100. Such units had a daily sale of about Rs. 300 or even more especially during the hot season. All the workers employed in this occupatuion were male adults and were paid monthly salary of between Rs. 40 and Rs. 60.

The materials required for manufacturing processes included various essences, sugar, syrup, lemon, fruit juice, milk, ice, etc. They were purchased from the local markets on wholesale basis. The cost of the raw materials was found varying between Rs. 50 per month in case of a small unit to Rs. 5,000 per month in case of a large unit. The products were sold to hotels and restaurants at wholesale rates and to individual consumers at retail rates.

Business was rather dull in the rainy season and more so in the cold season. But this was more than made up during the hot season when business was very brisk and the owners were, on the whole, able to maintain themselves well.

COPPERSMITHS.

According to the 1951 census there were, in the district, 610 self-supporting persons (including two women) who had coppersmithy as the principal means of livelihood. They made vessels of copper, brass, aluminium, etc. At the time of the survey in 1957, 35 establishments in Surat were engaged in this

COPPER SMITHS

occupation and they provided employment to a total of 110 persons. Most of the establishments were medium size units engaging three or four persons. The employment provided was full time throughout the year. No woman was engaged in this occupation and each employee had to work for about ten hours a day. The equipment required was simple and consisted mainly of scales, hammers, nails, etc. Its cost varied between Rs. 100 and Rs. 500 according to the size of the unit. Most of the establishments were housed in rented premises and their rent ranged from Rs. 30 to Rs. 80 depending upon the size and the location of the establishment.

The raw material which was purchased partly from local markets and partly from Bombay consisted of copper, brass, bronze, aluminium etc. The cost of the raw materials varied according to the total turnover. In a small unit it was generally between Rs. 1,000 and Rs. 2,000 per month while in a bigger unit it ranged from Rs. 3,000 to Rs. 5,000 per month. It was found that the cost of the raw material formed about 90 per cent of the total cost of production.

Owners of smaller units earned a net income of about Rs. 250 per month while those of larger units earned about Rs. 800 per month. The amount includes the wages of family members working in the establishment.

DOMESTIC SERVICES

The term 'Domestic Services' includes services rendered by cooks, coachmen, watchmen, private motor drivers, door-keepers and other indoor servants. At the time of the 1951 census 8,551 persons, including 1,810 women were engaged in these services in the district. Of these, 2,727 men servants and 840 women servants were serving in Surat. They were generally employed by well-to-do families or high Government Officers and had no fixed hours of services. The cooks were of two types; those who served regularly in private houses throughout the year and those who were mainly employed at the time of marriage ceremonies and other festive occasions. Their wages were fixed accordingly. They got food in their respective employers' houses, free of charge.

The water carriers had generally to work during morning and evening hours. They were paid according to the number of pots of water supplied by them. In some cases they were paid fixed amounts either daily or weekly. The duties performed by motor-drivers, watchmen and door keepers are obviously clear and need no explanation.

The indoor servants had to perform various types of duties such as cleaning houses, washing clothes, cleansing utensils etc. While some of them were permanent servants in a particular family others had to shift from place to place as they were employed for a fixed work and for a fixed time.

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DYEING AND PRINTING

At the time of the survey 36 establishments were engaged in dyeing and printing work in Surat. They provided full time employment to 176 persons, all of whom were males. Most of the establishments were medium-size units, each engaging three or four persons. They did dyeing or printing work on cotton, woollen or silk garments supplied to them by the customers. Dyeing and printing charges were about As. 10 and As. 8 per yard respectviely.

The equipment required consisted of a few pots and pan for boiling and rinsing cloth, buckets, printing block etc., The cost of the equipment varied between Rs. 100 and Rs. 300 according to the size of the unit. The establishments were housed in rented premises. A small unit paid as rent Rs. 10 to Rs. 15 a month, while a bigger one paid Rs. 40 to Rs. 50 per month.

Materials required for dyeing and printing processes consisted of colours, chemicals, dyes, etc. They were generally purchased from local markets. Their cost varied from Rs. 40 to Rs. 150 per month, according to the total turnover of the unit concerned.

There was no clear-cut division of labour but the work requiring greater skill was generally entrusted to experienced workers lighter work such as boiling or rinsing of clothes was done by the remaining workers. The former earned between Rs. 60 and Rs. 90 a month while the latter earned between Rs. 40 and Rs. 50 a month.

The occupation could not be said to be very profitable but afforded fairly decent maintenance to those engaged in it. The net earnings of an individual employer varied between Rs. 50 and Rs. 200 per month, according to the size of the the unit.

EDUCATIONAL SERVICES

The first half of the 20th century witnessed a very substantial increase in the number of persons engaged in educational services in the district. In the census year 1911, 1569 persons were engaged in these services while, after a period of 40 years, in 1951, as many as 5,515 persons were engaged in them. These numbers include all those engaged in educational services i. e. professors, teachers, clerks, peons, etc. The 1911 census did not give separate figures for teachers and professors. The 1921 census recorded 2,003 teachers and professors in the educational services of the district. In 1931 the number came down to 1,806, but it again increased to 5,359 in 1951. Information received from the District Educational Inspector showed that by 1957 there were in all 6,937 teachers in the district. The phenomenal increase in the number of teachers, particularly during the last few years, indicates beyond doubt that the need and importance of education have been recognized both by the Government and by the general public.

EDUCATIONAL SERVICES

Of particular significance is the increase in the number of women teachers. The district had only 99 women teachers in 1911 but there were as many as 743 in 1951. The number is still increasing and the information received in 1957 from the District Educational Inspector indicated that there were more than 900 women teachers in the district during the year.

There were in all 1,935 schools in the district in the year 1957.

They were as followes :—

School	*Number*	*Teachers*
Primary schools	1,849	5,626
Middle schools	18	75
High schools	68	1,236
Total ...	1,935	6,937

Besides, there were 8 Pre-Primary schools which were run by private institutuions.

The basic salary for a trained primary teacher was Rs. 40 while for an untrained teacher it was Rs. 35. The primary teachers in the municipal schools at Surat got house rent allowance in addition to the other usual allownces which were the same for all primary teachers trained or untrained. The basic salary in the secondary schools was Rs. 80 in case of trained teachers and Rs. 70 in case of untrained teachers. There were by 1957, six colleges in the district four at Surat and one each at Bulsar and Navsari employing a total staff of 175 persons. The four colleges at Surat employed 103 persons while the colleges at Navsari and Bulsar employed 40 and 32 persons respectively. These included both the teaching as well as the non-teaching staff. The scale of professors and of lecturers was the same in all the colleges i. e. Rs. 300-15-450 and Rs. 200-10-300 respectively.

FLOUR MILLS

The number of flour mills is increasing all over the country and this district is no exception. People have begun to prefer to get their grains ground in the mills so as to save both time and labour.

There were, at the time of the survey, 77 flour mills in Surat engaging a total of 275 persons. The use of electric machines was found common in most of the units. The flour mills were concentrated in no particular locality but were found scattered all over the city. Some of the mills were very small in size. They were one-man establishments where the owner himself used to manage the whole business. An average unit, however, employed 3 to 4 paid works. The employment provided to them was full time throughout the year. An individual worker was paid wages of about Rs. 50 per month and he had to work for about 10 hours a day.

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FLOUR MILLS

Samples selected for survey were mainly representative of medium size units. Such a unit generally employed 3 to 4 workers. A majority of the units were housed in rented premises, the rents varying between Rs. 30 and Rs. 50 a month.

The equipment required included electric machine, oil engine, scales, etc. The cost of the equipment varied between Rs. 1,000 and Rs. 3,000. The electric machine itself accounted for nearly half of the total cost of equipment.

The grinding charges were As. 6 to As. 8 per maund of grain. A medium size unit ground about 20 maunds of grain daily and thus earned Rs. 8 to 10 a day. After deducting the necessary expenses connected with the business the employer was able to earn a net profit of Rs. 4 to Rs. 6 a day ; the bigger units earned a larger profit.

GOLD AND SILVER SMITHS

There were as many as 170 establishments of gold and silver smiths in Surat. They prepared and repaired gold and silver ornaments of various types and designs. Most of the establishments were family concerns, where the owners carried on the work with the help of their family members or relatives. The total number of persons engaged in this occupation was 325 at the time of the survey. Most of the establishments were small in size engaging two to three persons but there were a few big establishments which engaged eight to ten persons. The employees were paid a salary of Rs. 50 to Rs. 60 a month.

The sample survey showed that some of the establishments could not provide full time employment to their workers. The business was particularly brisk during the marriage season and generally dull during the monsoon. So many of the units worked with depleted staff during the dull season.

The equipment required was simple and consisted of hammers, bellows, crucibles, mould and nails. The cost of the equipment varied from Rs. 500 to Rs. 800 in case of small units and from Rs. 2,000 to Rs. 3,000 in case of bigger units. Many of the establishments were housed in the owners' own houses while a few were housed separately in rented premises. Their rents varied between Rs. 20 and Rs. 40 a month.

The materials required included gold and silver, chemicals for purifying these metals, polishing materials, fuel etc. The amount spent in purchasing such materials varied according to the size and turnover of the establishments.

The establishments were scattered in all parts of the city. Some of the goldsmiths had their shops in more decent localities and were generally better decorated with furniture etc.

There was no division of labour in the small units. In the large establishments however, there was some kind of division

GOLD AND SILVER SMITHS

of labour, skilled work being done by the experts and ordinary work being done by others. This was necessary especially in view of the fast changing fashions in designs etc. A number of changes in the types and kinds of ornaments had taken place during recent years as a consequence of changes in the demand from customers. Many ornaments of old types and patterns were no longer fashionable and newer types had taken their place. This was particularly true of women's ornaments.

Orders were received direct from customers. Generally metals like gold and silver were supplied by the customers who placed orders for ornaments. The ordinary goldsmiths could not afford to purchase or stock these precious metals. Richer goldsmiths did have their own stock and they prepared ornaments according to the orders received without taking the metal in advance from customers. Customers had to pay the entire amount when the manufacutred ornaments were delivered to them. Some of the goldsmiths, however demanded some amount in advance by way of deposit.

The employers complained that the occupation was not as profitable as it had been in the past. But they were able to maintain themselves except in abnormal years of famine, depression etc. when people were unable to purchase ornaments.

HAIR CUTTING SALOONS

There is a growing tendency among barbers to have fixed establishments in decent localities of towns and this was visible in Surat also. More than half of 269 hair cutting saloons were locoted in four of the 12 wards of the city. As shown in the table given at the end of the chapter (Table No. 3), 138 saloons were located in the wards no. 2, 3, 4, and 5 while the remaining 131 saloons were located in the remaining eight wards.

More than half of the total number of persons engaged in this occupation were employers themselves. Many establishments did not employ any outside worker; the owner of the unit used to manage the whole business either alone or with the help of one or two male members of his family . Most of the units were housed in rented premises and their rents varied between Rs. 15 and Rs. 30 per months.

The equipment consisted of scissors, razors, hair cutting machines, mirrors, chairs etc. The cost of equipment varied according to the size of the units. In case of small units it was about Rs. 200 while in case of large units it even went up to Rs. 2,000 The owners had also to spend some amount in purchasing hair oil, soaps, snow, toilet powder etc. The amount varied according to the size of the unit. Generally it remained between Rs. 30 and Rs. 50 a month.

The sample survey showed that 35 percent of the total number of units did not employ any outside worker; 30 percent employed

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HAIR-CUTTING SALOONS

one outside worker; 20 percent employed two and the remaining 15 percent employed more than two workers. No unit, however, employed more than five workers. A worker was paid between Rs. 45 and Rs. 75 a month.

The following service charges were prevalent.

Chin shaving 2 annas.

Hair-cutting: 8 annas for men and
6 annas for children.

Some rich persons called barbers to their residences for a daily shave and also for a haircut. They were generally charged on a monthly basis at a rate somewhat higher than the prevailing market charges.

The net monthly earnings of the small units varied between Rs. 50 and Rs. 100 a month while those of the larger units varied between Rs. 150 and 250 a month.

LAUNDRIES

In this district, as in many others, two different types of washermen were found-those having fixed establishments (Laundries) of their own in the bazar and those having no such establishments. The latter used to take away clothes from the individual customers and deliver them back at their residences. The number of such washermen is gradually becoming smaller as they find it in their own interest to open shops for receipt and delivery of clothes. Our account here relates only to the former .ype though the general observations made presumably apply to the latter also.

At the time of the survey there were 55 laundries in Surat engaging 82 persons. Many of the units were one man establishments where no outside worker was employed. The individual employer himself used to manage the entire business. Most of the laundries, usually, entrusted the washing work to certain individual washermen who were paid a fixed amount for a certain number of clothes washed by them. Generally it was between Rs. 6 and Rs. 8 for 100 clothes. The clothes thus washed were again taken back to the laundries where they were ironed and wrapped properly and then distributed to the respective customers on the counter. A majority of the units were housed in rented premises. There was a big gap between the rents paid by the smaller units and those paid by the larger units. A small unit paid as rent Rs. 10 per month while a big unit paid as much as Rs. 125 per month.

The equipment consisted of washing machines, ironing machines, tables, cupboards etc. The cost of the equipment on an average was round about Rs. 1,000 but in case of those laundries which used special machines for dry cleaning work it went even

LAUNDRIES

up to Rs. 5,000. Such a machine cost about Rs. 3,000. The laundries had to incur expenditure on soap, bleaching powder, chemicals, nili, fire wood, etc. This expenditure varied between Rs. 60 and Rs. 250 per month according to the size of the unit.

Persons belonging to the rich or the upper middle class families were regular customers. Other people of modest means did not give clothes to laundries. They washed their clothes at home and got them ironed in laundries specially on certain festive occasions.

The business was profitable particularly for the large establishments. Some of them earned a net profit between Rs. 250 and Rs. 350 a month. The smaller units earned between Rs. 75 and Rs. 150 a month.

LAW

The number of those engaged in the legal profession has been gradually increasing in recent years. The 1911 census included 163 persons in this profession. The number increased to 302 in 1921 but went down to 202 in 1931* After twenty years, in 1951, the number again increased to 366. This included practising lawyers as well as their clerks.

The information received from the District Court, Surat, in 1957, showed that there were 272 lawyers (including three women) in the district. Of these, 153 were in Surat, 42 in Navsari and 27 in Bulsar. The number of courts, in the district, was 18 excluding the three camp courts located at Ahwa, Mandvi and Chikhai, Surat had 1 District Judge's Court; 1 Assistant Judge's Court; 1 Civil Court; 3 Judicial Magistrates' Courts and 2 Special Judicial Magistrates' Courts.

There were five Bar Associations in the district one each at Surat, Navsari, Vyara, Bulsar and Kathor. They had a combined strength of 239 members.

MATTRESS AND PILLOW MAKERS

Many of those engaged in this occupation had no fixed establishments of their own. They worked as itinerant craftsmen wandering from street to street and house to house. They were known as *Pinjaras*. They carried their appliances with them and prepared mattresses, pillows etc. in the customers' own houses out of the raw-materials supplied. They never sold any ready-made products. To many of them it was a traditional business started by their great grand fathers. The total number of such craftsmen could not be estimated.

Those who had fixed establishments of their own prepared as well as sold ready-made mattresses, pillows etc. to the customers. The total number of fixed establishments in Surat was

*Census does not assign any reason for such a fall in the number.

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MATTRESS AND PILLOW MAKERS

16 wherein 38 persons were engaged. These establishments were mostly housed in rented premises-their rent varying between Rs. 30 and Rs. 80 according to the size of the units. The equipment required was simple and consisted of a bow and a sort of a baton which was used as a hammer on the bow-string. The cost of equipment, in most of the cases, was about Rs.100. The raw materials required were cotton, cloth and thread. The customers who supplied their own materials had to pay only carding and stitching charges. The carding charges varied according to the type of cotton new or old. Stitching charges were between anna 1 and annas 2 for a dozen stitches.

The workers employed in this business were all males and they earned between Rs. 40 and Rs. 50 a month. Some big establishments had to hire the services of clerks and accountants also. They were of course, paid a higher salary ranging between Rs. 60 and Rs. 80. The monthly earnings of average units were between Rs. 100 and Rs. 150. The bigger units, however, earned handsome profits. One of the big units employed as many as eight workers and earned about Rs. 1,000 every month.

The earnings of the roving *Pinjaras* could not be exactly assessed. In fact, their income was never fixed. The rainy season was particularly dull season for them when many of them had to face unemployment.

MEDICINE

The Medical profession is another important occupation besides Education and Law, which has attracted an increasing number of persons in recent years. The 1911 census included 417 persons, of whom 15 were women, under the term "Medical practitioners". This included medical practitioners of all kinds *i. e,* dentists, eye specialists and veterinary surgeons. Mid-wives, compounders, vaccinators and nurses numbered 254. Of them 173 were women. In 1912 the Bombay Medical Act (VI of 1912) was passed, which provided for the registration of qualified allopathic medical practitioners. According to 1931 census registered medical prectitioners including eye specialists, numbered 243 of whom five were women. Other persons 'practising the healing profession without being registered' numbered 192 including one woman. Mid-wives, vaccinators, compounders, nurses, etc. totalled 148 including 104 women. There were five dentists and only one veterinary surgeon. In 1938 the Bombay Medical Practitioners Act. (XXVI of 1938) was passed which brought the practitioners of Indian systems of medicine also under registration. Under this Act no one who was not registered as a medical practitioner either under the Bombay Medical Act of 1912 or the Bombay Medical Practitioners Act, of 1938 could practice medicine.

According to 1951 census 1,966 persons (including 386 women) were engaged in medical and other health services. They were

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MEDICINE

as follows.—

Groups.	Males.	Females.	Total.
Registered Medical Practitioners	1,048	123	1,171
Vaids and Hakims	179	4	183
Dentists	5	–	5
Compounders	246	—	246
Hospital and health services employees ...	91	29	120
Mid-wives	—	109	109
Nurses	—	131	131
Vaccinators	1	—	1
Total	1,570	396	1,966

MOTOR REPAIRING

At the time of the survey there were 15 motor repairing establishments in Surat, engaging a total of 52 persons. Most of the establishments were small in size engaging three to four persons. They did repairing and rehauling of auto-cars, battery charging, replacement of parts etc. This was the principal means of livelihood for the employers and provided full-time employment to the employees. Most of the establishments were located on the main roads of the city and were housed in rented premises. Their rent varied between Rs. 15 and Rs 40 per month according to the space occupied.

The equipment consisted of lathes, battery-charging plant, electric drills, tools, jacks, press screws and also testing and measuring instruments. The cost of the equipment generally varied between Rs. 1,500 and Rs. 3,000. The materials required for the repairing work included spare parts, welding wires, screws, bolts, kerosene oil, lubricating oil, petrolieum etc. These were purchased from the local markets.

As the repairing work required skill and experience, mostly experts were employed and they were paid handsome wages. In each of the establishments there was at least one expert mechanic. The other workers worked under him according to his direction. In many cases the employer himself was an expert in the line. The wages of the skilled workers varied between Rs. 75 and Rs. 100 and those of the unskilled assistants between Rs. 40 and Rs. 75.

The earnings of an individual employer were not fixed and regularin all months of the year; but, on an average, he was able to earn between Rs. 125 and Rs. 200 per month.

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POUNDING AND PARCHING OF GRAINS AND PULSES.

A few persons were engaged in pounding and parching of grain and pulses; and for most of them it was an ancestral business. The number of establishments engaged in this work at the time of the survey in Surat was 25 where 68 persons were engaged. Most of the establishments were family concerns where no outsid worker was employed. The work was carried on by the employers with the help of their family members or near relatives. Women of the families were also engaged in this occupation. The occupation was a principal source of livelihood for the employers but the business remained dull during monsoon which was a period of compulsory idleness for some of the units.

The establishments were mostly housed separately in small buildings or hutments owned by the employers themselves. The equipment required consisted of a frying pan and two or three open iron pans. The cost of the equipment varied between Rs. 5,000 and Rs. 7,000.

There was no clear cut division of labour. Generaly hard work requiring much physical strength was done by male adults and the lighter work was done by women and boys. The introduction of machines, however, have saved much labour on the part of the workers. The materials supplied for parching or pounding included paddy, gram, pulses, etc.

The products prepard by these establishment such as *Churmura* or *mamra*, *Chana dal* etc. were sold to the hotels and restaurants and the retail hawkers. Some of the employers sold the products in their own shops while others hired salsmen to carry the products from house to house to sell them. The workers were paid on piece rate system as well as on monthly salary basis. On an average they were able to earn about Rs. 2 on every working day. This was a profitable occupation for the employers and they were able to earn between Rs. 150 and Rs. 500 every month.

PUBLIC ADMINISTRATION

Jobs in public Administrative services are highly prized both by the educated and the uneducated. A fairly large number of persons in Surat district are employed in public administrative services. The census includes, under public Administration, broadly, services of police, persons engaged in defence services, persons employed by the State and Union Governments, employees of municipalities and other local bodies, village officials and servants and village watchmen. The census, however, excludes those Government servants who follow learned professions like medicine, law and education. They are grouped separately under the appropriate heads. The 1911 census included 6,764 persons in the public administrative services. In 1931 the number came-down to 5,245. But in 1951, the number nearly doubled and was 11,159, as shown in the following table:-

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TABLE No. 2

NUMBER OF PERSONS ENGAGED IN PUBLIC ADMINISTRATION.

Occupation	Year				Year			
	1911		1921		1931		1951*	
	Men	Women	Men	Women	Men	Women	Men	Women
1. Police	1,007	5	953	—	995	1	1 927	10
2. Service of State	1,349	100	941	6	1,757	17	5,016	113
3. Municipal and other local Services ...	658	197	737	74	510	59	2,048	813
4. Village officials and servants other than watchmen.	3,504*	267*	2,291	109	963	24	957	33
5. Village watchmen	—	—	59	4	69	—	242†	—
6. Service of India and Foreign States	240	8	60	12	22	—		
7. Army	6	—	—	—	—	—	—	—
Total...	6,764	577	5,041	205	4,136	101	10,190	969

* Figures for the 1941 census are not available.

* Many of these village officials and watchmen were not full time servants of the Government and they had to fall back upon agriculture.

† Employees of Union Government only.

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PUBLIC ADMINISTRATION

Before drawing any conclusions from the table, however, it should not be forgotten that due to the intergation effected in 1949, Surat district at the time of the 1951 census was not of the same size as it was before that. As indicated in the beginning of this chapter, Surat district consisted, at the time of the 1951 census, of the area of the former Surat district of Bombay Province (except for two villages transferred to Nasik district and three villages transferred to Dangs district,) with the addition of the former Indian States of Bansda, Sachin and Dharampur, Navsari district of the former Baroda State, twenty four villages of Broach district and four villages of Dangs district :—

Of 11,159 persons, engaged in these services in 1951, 3,978 were in Surat proper. They were. —

	males	Females
Police	377	3
Employees of Municipalities & Local Bodies	1,410	645
Employees of State Government	1,194	35
Employees of the Union Government	215	—
	3,196	683

The scales of pay, terms of services and methods of recruitment with regards to Government Servants, are uniform throughout the State of Gujarat and are governed by the rules and regulations of the Government. The Municipal and other local bodies, however, have got their own rules and regulation of service under the general supervision of the State Government.

RELIGION

Religious services are not so attractive now as they were in the past. The number of persons engaged in them has gradually gone down. According to 1911 census 3,612 persons were engaged in various religious services. The number decreased to 2,972 in 1921 and to 2,419 in 1931. It slighty increased to 2,511 in 1951.

The persons recorded under the head 'religious services' broadly include priests, *sadhus*, *mullahs*, *kazis*, persons engaged in temples, burial grounds and burning ghats. Of 2,511 person engaged in these services in 1951, 2,353 were priests, *sadhus* and religious workers, 99 were workers in burial and burning ground services and the remaining 59 were persons engaged in charitable and welfare institutions.

RESTAURANTS

Restaurants and tea houses have become an important occupation in view of the employment opportunities provided by them.

The number of such establishments is rapidly growing and the number of persons engaged in them is gradually increasing. The rapid growth of this occupation is particularly noticeable in certain important trade centres such as Surat, Navsari, Bulsar, etc.

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RESTAURANTS

At the time of the survey there were 409 restaurants and tea-shops in Surat engaging a total of 2,507 persons. These establishments could be divided, broadly, into three categories ; small units engaging two to eight persons, medium size units engaging eight to twelve persons and large units engaging 12 to 20 persons. A few samples representing each of these three categories were selected for the survey. The survey showed that in most of the establishments the owners themselves worked in the units generally as supervisors or managers. Only in a few big hotels outsiders were employed as managers. Some big units engaged special accountants and clerks also. Cooking work was entrsuted to experienced persons and they were not asked to do any other work. The work of serving the customers was entrusted to a different group of workers known as 'serving boys'. The other works such as of cleansing the utensils, sweeping the floor etc. were done by the rest of the workers. An individual worker had to work for about eight hours a day but the restaurants usually remained open for 12 to 14 hours daily. The wages of the employees varied according to the nature of their work. The cleaners and sweepers were paid between Rs. 15 and Rs. 30, the serving boys' between Rs. 25 and Rs. 45, the cooks between Rs. 35 and Rs. 60 and the accountants, if any, between Rs. 50 and Rs. 90, a month. All of them were provided with tea, breakfast and meals free of charge. Those having no residence of their own were allowed to stay in the establishments.

The restaurants were spread all over the city though some decent ones were particularly concentrated in the important localities such as Chawk Bazar, Station Road, etc. Their rents varied according to the space occupied. The small size units paid between Rs. 20 and Rs. 40, the medium size units between Rs. 40 and Rs. 80 and the bigger ones between Rs. 80 and Rs.150 per month, as rent. Exceptionly big units, situated in busy localities paid even higher rent.

The restaurants had to spend a considerable amount in purchasing equipment which consisted of cooking utensils, vessels, glass-ware, chinaware, cup-boards, chairs, tables and electric fans. Some decent establishents were equipped with decorative mirors gramophones and radios. The cost of the equipment ranged from Rs. 500 to Rs. 12,000 varying according to the size of the establishements and the facilities provided.

The materials required for preparing tea and eatables included sugar, milk, tea, rice, wheat, edible oil, ghee, spices etc. The amounts spent, every month, in purchasing these materials remained between Rs. 300 and Rs. 1,000 in small units, between Rs. 1,000 and 2,500 in medium size units and between Rs, 2,500 and Rs. 4,000 in large establishments. Most of these materials were purchased weekly from the local markets. The restaurants, usually, prepared snacks,sweets and hot drinks in their own establishments. Other things such as biscuits, ice-creams and cold-drinks were

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RESTAURANTS

purchased from their respective manufacturers on wholesale basis and served to the customers. The employers had to incur some other expenses which included electric charges, water charges and also advertisement charges, if any.

The monthly cash collections varied between Rs. 300 in the smallest unit to Rs. 6,000 in the biggest unit. The occupation was generally profitable for all the establishments but particularly so for the larger establishements. One of the largets units, for example, earned a net profit of Rs. 1,150 per month. But it required considerable investment, experience and training to run such establishments efficiently and so only those who had all these stayed and succeeded in this business.

SWEETMEAT AND FARSAN,

Sweetmeat shops :—

Surati sweets are known for their delicious tastes and wholesome contents not only throughout the district but throughout the whole State. Surati sweets are even appreciated in foreign countries. Particularly famous among these sweets are : *Ghari, Barafi* and *Sutar feni*.

At the time of our survey there were 40 sweetmeat shops in the city engaging a total of 126 persons. In addition to this, there were a few other shops which prepared both *farsan* and sweet preparations. Most of the sweetmeat shops were reported to be of medium size engaging three to four persons including the owner. The units were housed in rented premises and their rents varied from Rs. 20 to Rs. 100 depending upon the locality and the nature and size of the space occupied.

The principle of division of labour was maintained to a certain extent. The work of preparing sweets was entrusted to an expert who was helped by one or two assistants while the task of purchasing raw materials, keeping accounts and management fell on the owner himself. In some units the owner was also the expert in confectionary and he got the sweets prepared under his own guidance.

Milk, ghee and sugar were the chief ingredients required for sweetmeat preparations. They were purhcased from the local markets on wholesale basis. *Ghari* the most well-known among Surati sweets is prepared out of milk, ghee, sugar and *menda*. *Barfi* which is equally well-known is prepared purely out of milk and sugar. Other preparations which include different varieties such as *halwa*, *magaj*, *sutar feni*, *mesur* etc. were prepared from wheat or gram flour, sugar and ghee. These sweets were sold at a price varying between Rs. 1-8-0 and Rs. 3-0-0 per lb.

The utensils required for these preparations were locally known as *kadai*, *jhara*, *khadpa*, *chhini* etc. The cost of initial

investment and for a small unit was calculated at about Rs. 1,500. The business was particularly brisk during the winter when certain special varieties of sweets such as *badam pak*, *salam pak* etc. were prepared. They were sold at a higher price i.e. between Rs. 2 and Rs. 10 per lb.

The business was profitable for a few big units which had established themselves and earned a good-will. Their products were much in demand both in the city and sorrounding areas. Petty shop owners however, contended that their business was becoming less profitable due to severe competition from bigger units.

There is an association of the sweetmeat sellers known as 'The Mithaiwala Sahayak Mandal'.The Mandal which is affiliated to 'The Bombay State Sweet & Farsan Federation' was originally started in 1942 and was known as 'The Barfiwala Ghariwala Association' till 1947 when its name was changed to the present one. It is a representative body and has a strength of about 50 members.

Farsan shops :—

Surati *farsan* is as well-known as Surati sweets. Especially well-known is *bhusu*, a mixture of different snacks–which is well in demand even at distant places like Ahmedanad and Bombay.

At the time of our survey there were 58 *farsan* shops in the city engaging a total of 193 persons. Some shops prepared only *farsan* while others prepared sweets such as *jalebi*, *bundi ladu*, *mesur*, etc. A few shops maintained sitting accommodation where customers were served.

Most of the *farsan* shops in the city were found to be small in size engaging two to three persons. There were, however, a few big units, one of them engaging as many as twenty persons. Some of the well-known *farsan* items included *bhusu*, *shev*, *khaman*, *chevado* and *ganthiya*. The prices ranged between As. 12 and Re. 1 per lb.

The materials required for farsan preparations include gram-flour, wheat flour, edible oil, spices etc. These were generally purchased from the local market on wholesale basis. The equipment required for preparation purposes was generally the same as in sweetmeat shops. The cost of equipment varied from Rs. 500 to Rs. 1,000.

The workers were paid according to their skill and experience. Skilled workers were entrusted with the work of preparing the eatables and were paid between Rs. 60 and Rs. 120 a month. Others assisting him in the work got between Rs. 30 and Rs. 80 a month. The survey revealed that fuel charges and the *Raddi*

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paper charges together accounted for nearly 25% of the total cost of production.

The preparations were mostly sold directly to the customers at retail rates. Some shops also sold their preparations to tea stalls or to the hawkers.

The occupation was found to be fairly profitable for the big units through not for the smaller ones which had to rest content with a low rate of profits.

TAILORING FIRMS

Tailoring was found to be an important occupation in the district. At the time of the survey there were 386 tailoring firms in Surat engaging a total of 663 persons. A majority of the firms were medium size establishments engaging four or five persons. At the same time, however, there were a few very small firms engaging only one person and certain very big firms too which engaged as many as 12 to 15 persons. The occupation provided full time employment to the employees.

Most of the establishments were housed in rented premises and the rent varied between Rs. 12 and Rs. 90 per month according to the size of the unit. The small units paid Rs. 12 to 20, medium size units paid Rs. 20 to 50 and the large units paid Rs. 50 to 90 as rent.

Sewing machines, scissors, ironing machines, etc., constituted the equipment. The small size units worked with only one machine while the larger units required as many as 12 to 15 machines. Each machine cost about Rs. 400. The machines were generally purchased from the local agents of the manufacturing firms. Some of the firms had specialised themselves in men's clothes while others had specialised in women's clothes. The latter prepared clothes for children also.

The Principle of division of labour in this occupation was found to be well defined. The work of taking measurements and cutting the cloth accordingly was done generally by the owner himself, stitching work was carried on by his assistants and the other work like preparing button holes, stitching buttons etc., was left to the unskilled workers or boys.

The materials required included cloth, thread, button needles ironing machines etc. They were purchased from the local markets and their cost varied between Rs. 20 and Rs. 500 a month according to the size of the firm and its business. The stitching charges were broadly uniform in all concerns. They were as follows :—

		Rs.	As.
Shirts	...	1	8
Pants, Bush shirts	...	2	8
Coats	...	5	0
Frocks, Blouses	...	1	8

The charges were slightly higher in some big and well-established firms.

The wages paid to an individual employee varied from Rs. 40 to Rs. 75 depending upon his skill and experience.

There was much difference between the earnings of the small units and those of the large units. The former earned a total net income of about Rs. 100 a month while the latter earned about Rs. 400 per month. In other words, the business was just maintanable for the small tailor but it was profitable for one who had a bigger and modern establishment.

The previous sections have given an account of some important occupations in the district. In every district, however, there are a large number of persons who earn their livelihood by following certain unproductive activities. These persons belong to no particular occupation or profession and yet they earn, more or less a fixed income every year. Proprietors receiveing rent from their properties, persons receiving pensions, scholorships and funds, inmates of jails, recipients of doles, beggars and vagrants etc. may be included in this class.

According to the 1951 census, there were 5,042 self-supporting persons in the district who derived their livelihood from unproductive activities as shown below :—

NON-PRODUCTIVE MEANS OF LIVELIHOOD

	Males.	Females.	Total.
1. Persons living principally on income from non-agricultural property.	559	699	1,258
2. Persons living principally on pensions remittances scholarships and funds.	1,004	337	1,341
3. Inmates of Jails, almshouses and recipients of doles.	8	2	10
4. Beggars and vagrants	895	391	1,286
5. All other persons living principally on income from non-productive acticlties.	780	367	1,147
Total ...	3,246	1,796	5,042

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TABLE No. 3

STATEMENT SHOWING THE WARD-WISE DISTRIBUTION OF ESTABLISHMENTS ALONG WITH THE NUMBER OF PERSONS ENGAGED IN THEM, OF A FEW MISCELLANEOUS OCCUPATIONS IN SURAT CITY IN 1956.

Sr. No.	Occupation.	Wards.												Total for all Wards.	Employment provided to (including family members)		
		1	2	3	4	5	6	7	8	9	10	11	12		Males	Females	Total.
1.	Bakeries	9	8	5	6	2	—	3	3	1	9	2	7	55	103	—	103
2.	Boarding and Lodging Houses	—	—	3	3	3	1	20	1	—	2	2	3	38	329	—	329
3.	Cap making	—	—	7	5	3	4	4	2	8	6	3	3	45	155	—	155
4.	Copper and brass smiths	—	1	7	1	9	—	14	—	—	1	2	—	35	110	—	110
5.	Flour Mills	4	15	12	5	1	3	8	5	4	10	4	6	77	275	—	275
6.	Goldmiths and Jewellers	10	9	72	1	12	8	9	7	11	8	12	11	170	325	—	325
7.	Hair cutting saloons	8	27	53	26	32	18	20	12	13	13	19	28	269	329	—	329
8.	Laundries	1	1	12	4	2	3	9	1	8	5	6	3	55	82	—	82
9.	Manufacture of aerated waters	1	2	7	1	1	1	—	—	—	1	1	1	16	63	5	68
10.	Mattress and Pillow makers	—	1	4	2	2	—	1	—	—	—	2	3	15	38	—	38
11.	Motorbody building and repairing	2	—	1	1	—	—	4	2	2	1	1	1	15	62	—	62
12.	Pounding and Parching of grain pulses ..	—	1	9	9	2	—	2	—	—	—	1	1	25	68	—	68
13.	Printing and dyeing	3	2	5	1	4	2	4	1	5	7	2	—	36	176	—	176
14.	Restaurants and teashops	16	35	53	38	40	28	57	26	43	22	28	23	409	2,506*	1	2,507
15.	Shroffs	—	1	2	—	1	—	—	—	1	7	3	1	16	322	—	322
16.	Tailoring	20	32	42	40	30	28	32	18	47	37	33	27	386	663	—	663
	Total ...	74	135	294	143	144	96	187	78	143	129	121	118	1,6602	5,606	6	5,612

*Including 172 boys

CHAPTER 11—STANDARD OF LIFE

GENERAL.

THE PRECEDING CHAPTERS HAVE DESCRIBED the main aspects of economy of Surat district. It would enable the reader to have a broad idea of the nature of the productive resources of the district and of the employment pattern offered by them. On these resources and their exploitation depends the amount of the average annual income of an ordinary family, whether in rural or in urban areas, and the amenities of life within the reach of its members. The general economic and social well-being of the people is determined by the level of their income and the material benefits which an individual family derives from it and it is reflected to some extent in its expenditure pattern. Family may be taken to be the basic economic unit and the general conditions of its living are an indication of social and economic advancement of the community. Though the pattern of expenditure is a tangible reflection of the standard of life, its high or low degree depends essentially and basically on the total income a family earns and out of which its total expenditure has to be incurred. The starting point of any attempt to assess the standard of life of a community is to probe into the budgets of a few representative families. Such budgets would give an insight into the earnings of the families as well as their expenditure.

According to the 1951 census, Surat district has an area of 4,066.6 square miles and a population of 18,27,842 of which 78.7 per cent resides in rural areas and 21.3 per cent in urban areas. While the rural population is spread over 1,938 villages, the urban population is concentrated in the 15 towns and cities of the district.

Though geographically Surat district is divided into three broad regions, namely, (1) the coastal belt, (2) the agricultural belt and (3) the eastern hilly region, there are not very material variations in their economic conditions and broad generalizations about aspects of their living would be fairly correct.

In any society, conditions in urban areas are to some extent different from those in rural areas. The ways of life in a village with its comparative isolation and its predominantly agricultural character are not the same as those to which people living in cities and employed in industry, trade or services are or have to be accustomed. It would be better, while judging the standard of life of an average resident of the district, to speak separately of those who live in rural areas and those who live in towns and cities.

CHAPTER 11.

Standard of life.

RURAL AREAS

To deal with the rural population first, broadly speaking, agriculturist can be classified into different strata according to the size of the holding or holdings they cultivate and the income they derive from the cultivation. It may not necessarily happen that the land they cultivate is owned by them. Some of it may belong to another owner and be taken up by them for cultivation on a tenancy basis. From the economic point of view, however, it is not ownership that matters but the extent of holding and the income that accrues from its being put under the plough.

A description of the standard of life of the rural population is beset with some difficulties. In the first place, inspite of the general prevalence of money economy, several exchange transactions do take place in rural areas in terms of agricultural commodities and though it is possible to evaluate them in terms of money, their economic significance cannot be fully brought out in such a calculation. Secondly, almost all classes are, in some capacity or other, connected with the cultivation of land. Either as landlords or as tenants or as hereditary village servants claiming a legal or customary share in the produce of the field, a large section of village population has a share in the produce of field. On the other hand, almost all farmers supplement their income by following related and allied occupations, either in the village itself or near it. Some families regularly or occasionally get help from some members of their families who are employed in cities. In these circumstances, a clear cut differntiation in occupations and economic classes is hardly possible and any precise monetary allocation of income into different channels of expenditure is not feasible. All the same, an account to be generally intelligible can only proceed on the basis of occupation and on calculation of money earnings and money expenditure. The following description may be taken to convey a general outline of the economic picture.

A survey of a few families in some typical villages of the district was carried out and the account given below is based on the material that was made available from the survey and also on personal observation.*

BIG FARMERS.

What may be described as the top strata† of the village community is constituted by the comparatively bigger cultivators whose holdings are fairly substantial and who would therefore require a large number of implements and more than one pair of bullocks to carry on agricultural operations. The actual number of acres being cultivated by persons who fall in this category will not be the same in all cases. An analysis of the

* The villages that were surveyed were :

Anklach in Bansda taluka, Sarbhan in Bardoli taluka, Untdi in Bulsar taluka, Maga in Gandevi taluka, Kamrej in Kamrej taluka, Amkach in Mahuva taluka, Bodhan and Maldha in Mandvi taluka, Pinjrat in Olpad taluka, Palsana in Pardi taluka, Panchpipla in Songadh taluka and Kalakva in Vyara taluka.

† Conditions in regard to ownership and tenancy will materially alter after the enforcement of tenancy laws enacted after 1952.

data collected indicated that a family in this class on an average possessed 61 acres of land. All the land cultivated by such farmers belonged to the family.

The size of the farming business is customarily expressed in terms of the number of working bullocks maintained by the farmer. If the holding happens to be in a rich region, less number of acres will be required for maximum utilization of necessary pairs of bullocks than what will be required for the cultivation of soils in less fertile regions such as hilly tracts on the eastern side of the district. The bigger cultivator referred to here is taken to be an agriculturist who possesses more than one pair of working bullocks. The average number of bullocks per family as found from the data collected came to six. In addition to bullocks, each family also possessed other animals such as cows, buffaloes, calves, etc. On an average they were found to be nine in number.

The average size of the family came to 10 persons. This rather big size was due to the widely prevalent joint family system amongst them. The families of this class employed two or three persons as family servants. They did both agricultural as well as domestic work. A majority of these servants were found governed by the hali system wich was widely prevalent in the district in the past but which is now fast disappearing. They mainly came from scheduled tribes such as *dublas dholias* etc.

The investigation showed that the percentage of literacy was as high as 91.1, though the level of literacy differed from family to family. Of the literates, 40.3 per cent had their education upto primary stage *i.e.* upto fourth vernacular standard ; 58.3 per cent upto secondary level *i.e.* upto the school leaving examination and 1.4 per cent were educated beyond that stage. Though the level of literacy was high, it had no impact upon the occupational mobility of this class as such. The family members, on the whole, joined the hereditary occupation of farming after completion of study and carried on cultivation.

The number of earners per family came to about three. Only 33.3 per cent of the families had both male and female earners. Some of the female members helped the male earners in carrying out agricultural operations speedily and efficiently. It was further found that female earners constituted over 27 per cent of total earning population.

The average annual income per family came to Rs. 6,131. The impact of this high level of earning was reflected in the form of savings. Nearly 66 per cent of the families surveyed saved regularly in the form of bank deposits, insurance premia and subscription to shares of co-operative societies, etc. and nearly 77 per cent borrowed money for productive purposes such as trade, digging wells, etc.

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The household equipment of these families was what might be described as adequate to give comfort. The use of brass utensils was common. Bedding consisted of mattresses, cotton and woollen blankets, rugs, pillows and *chaddars*. The families possessed valuable gold ornaments such as necklaces, rings, bangles, ear-rings, etc. They also had the necessary agricultural implements such as seed drills, harrow, axe, pickaxe, spade, sickle, etc. in sufficient quantity.

It seems therefore that this class as a whole enjoyed a higher level of living. But the number of such families in this comparatively happy position in any village was not very large. In fact they formed a small minority of the entire agricultural community and their standard of living therefore can in no sense be taken as typical of the village as a whole.

Medium Cultivators.

Below the top strata and comprising a considerable sector of the population engaged in agriculture comes what may broadly be described as the agricultural middle class or the peasantry. It mainly consists of cultivating owners cultivating holdings of medium size. They may have anything between 10 to 30 acres of land and though on account of this variation, there may be perceptible differences in the incomes of particular families, the pattern of life is found to be more or less similar. The investigation indicated that a family in this class on an average possessed 20 acres of land.

The average size of the family came to seven persons. As in the case of big cultivators, the families of this class engaged one full-time servant. The percentage of literacy came to 62.2. Study upto primary level was a distinguishing characteristic of this class. Of the literates, 60.6 per cent had their education upto primary level, 37.7 per cent upto secondary stage and 1.7 per cent beyond matriculation. It was found that many families could not afford to spend the money needed for secondary and higher education. Moreover, some of those who passed the vernacular final examination became teachers in primary schools.

The number of earners per family came to nearly three. Even though the economic responsibility of maintaining the family devolved upon the male members, the contribution of women and children towards the family income was considerable. The investigation indicated that over 42 per cent of the families surveyed had both male and female earners. Female members contributed towards the family income by helping the family in carrying out various agricultural operations and by engaging themselves in mat-making work.

Big Farmers

The average annual income of a family in this class stood somewhere between Rs. 1,500 and Rs. 2,000. The main source of income was farming and the subsidiary sources were employment as agricultural labourer and in mat-making work. As

the level of income was not high, few families were found to be saving. The investigation indicated the percentage of such families to be about 27. It was also found that many families were required to incur debt for various purposes, namely, for consumption, for meeting expenditure on marriage and similar ceremonies and for purposes of improvement of land and farming business. The amount owed often came to about Rs. 1,000 and the main agencies of borrowing were relatives, friends and co-operative societies.

The prosperity or otherwise of this middle class of rural peasantry depends almost entirely upon good or bad monsoons. A little encouragement by way of rise in food prices or cash crops is immediately reflected in the economic position of this class ; it helps them in wiping out their debts and if possible to save for future contigencies. On the other hand, even a little worsening of their position by way of agricultural depression adds a lot to their difficulties by affecting their economic position adversely.

Tenant cultivators.

Just above the lowest rung of the agricultural ladder stands the class of tenant cultivators. Recent land legislation during post-independence period has reduced some of their difficulties. Certain steps such as long-term financing, irrigation, seed supply, co-operative development, etc. have also been taken by Government towards improving their condition. But they will take some time to raise their standard of living. Tenant cultivators, as the name implies, have no land of their own and upto recent times the right to cultivate the land was dependent upon the sweet will of the landlord, However some of these tenants own farms varying from one to five acres. The number of acres cultivated on tenancy basis by persons who fell in this category varied from 15 to 20 acres.

The averege size of the femily in this class came to eight persons. The big size of the family was due to the prevalence of joint family system. Literacy came to 34.5 per cent which was the lowest as compared with the other classes discussed so far. These families thus could not take full advantage even of the available educational facilities.

The family on average possessed two pairs of bullocks and other cattle such as cows, buffaloes and goats. They had also some agricultural implements needed in carrying out agricultural operations. But very few had enough of them.

The number of earners per family came to about three and female earners constituted over 42 percent of the total earning population. The average annual income per family in this class came to Rs. 1.250. As the level of earnings was not high, no family was found saving for purposes of investment or for meeting any family contigencies. It was also reported that several families found it difficult to balance their monthly budgets and had some times to meet deficits by incecuring debt.

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Landless labourers.

At the lowest rung of the agricultural ladder stands the landless labourer. He has no farms and makes his living by hiring out his labour for wages which are paid mostly in kind. It may be that there may be some agricultural labourers who may technically be described as land holders because they own a piece of land. But it is so small and the income they derive from it is so meagre that for all practical purposes, they can be treated as landless labourers, Out of 42 families surveyed, three were found owning land. Its size varied from two to four acres.

The average size of the family in this group came to nearly six persons. The investigation indicated the percentage of literacy to be 36.1. Of the literates, a majority- 75.3 per cent studied only up to primary stage.They could not study further presumably because of adverse economic conditions.

The number of earners per family came to four. In almost all families, women, grown up boys and girls and some times even childern worked for supplementing the family income. In view of the fact that landless labourers get their wages both in kind as well as in cash, it is difficult to estimate their total annual income. On the basis of the data collected, it was found that the annual income per family varied from Rs. 400 to Rs. 500.

Beyond the bare minimum of traditionally prescribed essential ornaments of married women, which are usually of brass or tin and in very rare cases of silver, the family does not have any other valuables. Clothing is very poor. The kitchen and dinning equipment mainly consits of a few earthen and tin utensils.

It is found that this class as a whole finds it difficult to get employment throughout the year. The period of unemployment varies from four to five months. During that period they are forced to borrow for consumption purposes. They call it *khawti*.

In fact, due to low rates of remuneration, low level of literacy, and lack of employment opportunities for the whole year, their standard of life is very low. Poverty tends to make that life stagnant and promotes a fatalistic outlook.

Village Artisans.

Village artisans who are still to a large extent treated as servants of the village community form an important class by themselves. The main components of this class are the *suthar* (carpenter), *luhar* (blacksmith), *mochi* (cobbler), *kumbhar* (potter) and *darji* (tailor).

The average size of the family in this class came to 6 persons and the percentage of literacy came to 74. This means that a majority of the members go for education, which is rather remarkable. Of the literates, 64 per cent had their education upto primary stage and 36.3 per cent studied upto secondary level. It was found that most of the members joined the hereditary occupation after the completion of study of the first few standards.

The investigation further indicated that nearly 75 per cent

of the families had their own houses. They were found adequate to provide room for carrying on the occupation, for keeping instruments and equipment necessary for it and for accommodating members of the family. The houses, in other words, were spacious. Some of these families owned small plots of land and cattle such as cow, calf, goat, etc.

CHAPTER 11. Standard of life. RURAL AREAS Village Artisans

The number of earners per family in this class came to about two and the average annual income of the family came to Rs. 1,480. The level of income was just enough to make both ends meet. Hence only a few families (eight per cent) were found saving.

Traders and others.

Traders form another distinct social group in the villages. The size of business of traders in different villages and even of traders in the same village varies greatly. While there is a small village grocer whose monthly business turnover comes to Rs. 250, there are traders whose turnover is well comparable to that of the urban trader. That is true of traders in the fairly big village which are important trade centres of the district.

The typical village trader is often a trinity of seller, buyer and money-lender. The agricultural bias of the rural economy has largely been responsible for this unique combinations of functions. The trader lends money on credit to the cultivator and realises the amount during harvests. At the harvesting season, many transactions take place in kind and the trader may purchase the agricultural produce from the cultivator to resell it to an urban merchant. The big traders thereby earn incomes sometimes comparable to those of big cultivators. But such merchants are found only in those bigger villages which act as collecting centres of agricultural produce.

While the average size of a family came to 6 persons, the percentage of literacy was found to be 70.5. Of the literates, 42.6 per cent had their education upto primary level, 54.0 per cent studied upto secondary stage and 3.4 per cent joined college for higher education. The level of literacy was thus high for this class.

The number of earners per family came to about two and the annual income per family came to Rs. 2,000. On account of comparatively high earnings, some families, about 50 per cent of those surveyed, found it possible to save.

Concluding Remarks.

The preceding analysis of different occupational groups can be said to present a broad picture of the rural levels of living. It will be clear that economic conditions of these groups differ widely from each other. Except the small minority of big cultivators and traders, the other classes of the rural population do not enjoy a particularly satisfactory standard of living. The economic and social set-up of the class of landless labourers is far from desirable. The medium sized cultivator is in a somewhat better position in the sense that in normal times his incomes

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may just suffice to cover his expenditure. It is noticed that except in the case of families of big cultivators and traders, expenditure on items like education, means of entertainment, etc. is comparatively less. As expenditure on food accounts for more than 65 per cent of this total expenditure, sufficient margin is not left for acquiring other amenities which are an essential part of civilized life. With better opportunities of employment, with better agricultural production because of improved methods of farming and with the salutary effects of the legislation for land reform introduced in recent years, the whole aspect of rural economy is likely to become much brighter in the not distant future.

URBAN AREAS.

A little less than four lakhs of the population of Surat district live in urban areas which consist of 15 towns. This is about 21 per cent of the total population of the district. Moreover, some places classed as towns may have characteristics not very different from those of villages because they may not have developed much industry or commerce.

The price increases that have occurred during the war and post-war period (1942 onwards) with regard to various articles of daily consumption have not affected urban and rural areas to the same extent. Even after making allowances for a certain number of articles that are sold dearer in villages than in towns, it remains broadly true that the cost of living in a town is some what higher than that in a village. However, the development of quick transport in the country-side has in many places tended to iron out the differences in prices of a number of articles between the villages and the towns which are well-connected by means of transport. Mention may be made of articles like milk, milk-products and vegetables produced in villages but sold with very small price differences in the towns nearby. But as one goes in to the interior, the price differences of such articles become apparent and their effect on the standard of life of the population living in the urban and rural areas becomes visible.

Particular reference may be made to housing accommodation. In most of the towns, the number of houses has not in any way increased in proportion to the growth of population. This is especially true of Surat city where rents have increased on account of shortage of housing and striking incresae in the cost of construction. The problem was further aggravated by the influx of refugees after the partition in 1947. New constructions have, however, lessened to some extent the difficulties of the past. The housing problem is not so acute in villages and expenditure incurred on that account is not very high.

Surat city.

Surat is an industrial and commercial as well as an educational centre. Important government offices are located in the city and large and small industries such as gold and silver thread industry, silk yarn industry, etc. have grown in it in recent years. Investigations of the family budgets of four different groups

of families in the city were made on a small sample basis and the broad picture that emerged from them is described below.

Unskilled Labour.

The class of unskilled labourers represents the poorer sections of the community and includes labourers engaged in construction of roads and buildings, wood and grass cutters, servants in shops, workshops, factories, hotels and restaurants, domestic servants, sweepers and scavengers, etc. Many of the schedules collected for this class of families could not specify any one kind of labour but reported only manual labour or '*majuri*' as their means of livelihood. This may be for the reason that there was not one kind of assured and continuous employment throughout the year for many. The schedules which indicated specified labour included work in fields, mat-making business, factories, earth work, households and dyeing shops.

The average size of the family came to four, males and females being almost equal. The percentage of literacy was found to be 26.9, 40.2 per cent among males and only 14.3 per cent among females. Of the literates, 83.3 per cent had their education upto primary stage and 16.7 per cent upto secondary stage.

The number of earners per family came to two. Nearly one-half of the families surveyed had both male and female earners. The low levels of income and poverty conditions compelled the female members to supplement the family income. Most of them worked as domestic servants. Regarding the status of the earning members, it was found that nearly 29 per cent worked on their own and that the rest-71 per cent worked for others, that is, they were employees.

The investigation further indicated that nearly 75 per cent of the families surveyed lived in one room tenements. It was also found that 75 per cent of the families paid monthly rent which varied from Rs. five to Rs. ten. Only 19 per cent of the families had their own houses; the rest lived in rented houses.

The average annual income which came to about Rs. 900 almost balanced the expenditure of the family, but the class as a whole could not save money for social, religious and educational purposes. Debts were incurred by many and the average of such debt per indebted family came to Rs. 540. The sources of borrowing were the money-lender, relatives, friends and credit-societies; relatives and friends being predominant. It was interesting to find that in a large number of cases the borrowers did not pay any interest as borrowing was mainly from friends, relatives and employers.

Unskilled Labour

In all families, bedding consisted of one or two mattresses, two or three *chaddars*, one or two pillows, blankets and rugs. No family possessed any valuable ornaments.

An analysis of the family budgets indicated that food accounted for 70 per cent of the total expenditure. Clothing, housing, fuel and lighting accounted for 6.4; 10.5 and 8.6 per cent res-

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pectively; miscellaneous items like toilet articles, washing utensils, cloths, barbers, cobbler, entertainment and education accounted for 4.5 per cent.

Skilled labour

Skilled labour is represented by the numerous classes of artisans such as gardners, workers in cotton mills, handloom weavers, brass and coppersmiths, carpenters, masons, workers in leather, washermen, barbers, drivers, etc. Skill of hand is necessary for all those who follow these occupations. The schedules collected for this class covered a majority of the artisans mentioned above.

The average size of the family in this group came to about six, males and females being practically equal. The percentage of literacy came to 65.1. Of the literates, 61.8 were males and 38.2 per cent were females. Thus a majority of the members were literate though the level of literacy varied from family to family. Of the literates, 62.9 per cent had their education upto primary stage and 37.1 per cent upto secondary stage. College education was however conspicuous by its absnce. Children of this class in general do not seem to aspire for higher education as they follow their own hereditary occupations.

The number of earners per family came to two. There were very few families who had both male and female earners. Female members did not work outside home except in case of extremely low income familes. In case of families of tailors and washermen, however, women helped men in carrying out the vocation.

The housing problem was not so actue for this class as it was for unskilled labourers. It was found that about 64 per cent of the families lived in rented houses. While about 14 per cent lived in one room tenements, the rest lived in two room tenements. Further, about 11 per cent paid rent which varied from Rs. 5 to Rs. 10, and 66.7 per cent paid rent varying from Rs. 10 to Rs. 20.

The average annual income and expenditure per family came to Rs. 1,842 and Rs. 1,638 respectively. The incomes of the families covered by the survey varied widely from Rs. 70 a month to Rs. 200 a month. The lowest income was shown by the families of cobblers, and high incomes varying from Rs. 150 to Rs. 200 were earned by families of goldsmiths, wiremen, textile workers and washermen. Some of these well-to-do artisans had their own shops with necessary capital investments in their trades. Even though the level of annual income of this group was high as compared to that of unskilled labourers, the level of expenditure was also high and very few families were reported to be saving. They had better household equipment and some even had a few ornaments. On the other hand, debts were reported to have been incurred by many families, mostly for ceremonies like marriage etc. The amounts which were borrowed generally from friends and relatives did not carry interest.

An analysis of the family budgets of this group indicated that the largest percentage of total expenditure was on food. It came to 58 per cent. Other items, namely clothing housing, fuel and miscellaneous group accounted for 6.3; 7.8; 12.8 and 15 per cent respectively.

Clerical and the Professional class.

This class includes all those occupations where the emphasis is on brain work and some minimum educational equipment. It includes the lower and middle strata of salaried persons in Government or private offices and some professionals like doctors, lawyers civil and mechanical engineers, etc.

The average size of the family in this group came to four, males exceeding females in number. The percentage of literarcy was as high as 72.8 that for men being 88.5 and for women 62.8. 17.6 per cent had their education upto primary stage, 61.8, per cent upto secondary stage and 20.6 per cent had college education. From the view point of educational achievements, this class stood first among all the classes discussed so far.

The number of earners per family came to one. The average annual income and expenditure per family came to about Rs. 2,337 and Rs. 1,897 respectively. The incomes of the families covered by the survey varied widely from Rs. 80 to Rs. 400 a month. While the lowest income was earned by the families of peons, constables and conductors; the high level of income varying from Rs. 200 to Rs. 400 a month was earned by the families of doctors, pleaders, engineers and professors. It enabled them to have some savings, either in the form of insurance premia or bank deposits of postal savings. The annual savings of some families came to Rs. 400. Only a few families 8 per cent were found in debt.

Household equipment in the shape of utensils, clocks, cloth etc. and furniture like tables, chairs, cupboards, etc. was in many cases found to be fairly adequate. Some had gold ornaments such as rings, earrings, bangles and necklaces. Families in this particular category may be said to enjoy a fairly satisfactory standard of living.

An analysis of the family budgets of this group indicated that food accounted for the largest percentage of the family expenditure, namely, 46.8 per cent. The next important item was the miscellaneous group accounting for 25.4 per cent of total expenditure. That group mainly included expenditure on domestic servants, educational and recreational items and travel. Education was naturally a regular item of expenditure. The remaining items, namely, clothing, housing and fuel accounted for 7.3; 11.5 and 9.0 per cent respectively of total expenditure.

Traders.

Although traders as a whole can be easily grouped in a class, it is difficult to distinguish between big and small traders. For the purpose of this survey small traders were taken to be those who earned a monthly income of Rs. 250

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or less and those whose monthly income was more than Rs. 250 were taken to be big traders. The families surveyed included those that dealt in grocery, cloth, stationery, oil vegetables, fruits, sweetmeats, jari, chemicals and drugs, tea, biscuit-making and in the manufacture of aerated water.

The average size of the family in this group came to 6, males and females being equal. It was thus higher as compared with the other urban occupational groups discussed earlier. The percentage of literacy came to 72.0 ; 87.8 for males and 56.5 for females. Thus an inclination to educate both male and female members was noticeable in this class. Of the literates, 36.6 per cent had their education upto primary stage. 55.0 per cent upto secondary stage and 8.4 per cent had college education. Only a few were found taking higher education ; the majority joined either the hereditary occupation or started new business after having acquired minimum necessary education.

The number of earners per family came to about two. Female members did not work outside. The average annual income and expenditure per family in this class came to Rs. 4,053 and Rs. 2,919 respectively. The incomes of the families covered varied widely from Rs. 180 to Rs. 500 a month. While the lowest income was earned by the families of florists, hawkers and manufactures of aerated water, a high level of incomes ranging from Rs. 250 to Rs. 400 a month was earned by the families of sweetmeat merchants, cutlery and stationery merchants, commission agents, contractors and vegetable merchants Traders who were connected with jari and wire-drawing industry and tobacco-sales earned more than Rs. 400 a month. Nearly 77 per cent of the families saved regularly in the form of bank deposits, insurance premia and investment in shares. The annual savings per family were reported to be about Rs. 1,808. Many families, howerer, borrowed for the purpose of the trade or business.

The household equipment of the families was fairly adequate for easy living. The use of brass utensils was common. Some families also used stainless steel and german silver utensils. Bedding included mattresses, cotton and wollen blankets, rugs, pillows, cots and *chaddars*. The families also possessed some valuable gold and silver ornaments, clocks and wrist-watches and certain items of furniture such as chairs, tables and teapoys.

An analysis of the family budgets indicated that the largest percentage of the family expenditure was on food, namely, 52.7 per cent. The next important item was the miscellaneous group which accounted for 24.9 per cent. The remaining items, namely, clothing, housing and fuel and lighting accounted for 9.37, 3.1 ; and 10.0 per cent repsectively.

The well-to-do and the rich.

The well-to-do and the rich class includes big traders, leading professionals like doctors and pleaders and high salaried officials. No upper limit can of course be fixed for families of this class but a lower limit of Rs. 300 is taken for classification of families. It included families of grocery merchants, sweetmeat merchants, cutlery and stationery merchants, merchants eagaged in tobacco, tea and jari trade, pleaders, doctors, professors, civil and mechanical engineers and income-tax experts. Except where the size of the family was very large, families in this class led a comfortable life and many were able to save enough for exigencies. It was found that increase in incomes was accompanied not so much by expenditure on articles of daily consumption as by expenditure on luxury articles or expenditure for the purchase of houses, etc. The survey conducted indicated that the well-to-do and rich class could be easily distinguished firstly from the type of houses in which they lived and the household equipment they had ; secondly from their higher expenditure on certain items of daily consumption, as also on recreation, education, etc. and thirdly from their saving habit. Their household equipment included costly furniture, radios and/or gramphones, costly clothes and valuable gold ornaments. Articles of daily consumption on which higher amount was spent were milk, vegetables and fruits. Engaging a full time domestic servant was another characteristic feature of this class. What distinguished the richer classes from the well-to-do was expenditure on costly comforts like motor cars, spacious houses and luxury goods which, apart from their utility, had also value for ostentation.

The urban area thus presents a picture of all socially significant sections of the population from the unskilled labourer who forms the lowest rung of society to the business class which stands topmost in urban society. Though it would be too hazardous to generalize for the urban area as a whole on the basis of the data collected, a general trend can be indicated. Wherever there has been the question of spending a little more to gain some comforts suited for a particular standard or of foregoing some comforts to save a little more, the trend of to day is to prefer the former to the latter. It is much more pronounced on account of the operation of 'demostration effect'. Further it is also found that it is the nature of skill in a family that determines its standard of life. For society as a whole, the emphasis should always be on the skill-formation of the members. A higher level of skill always means higher standard of life in the long run. It may however be added that with the acceptance of a welfare state as a national ideal and with the consequent increasing role of the state in proving, either freely or at cheaper rates, the essentials of civilized life such as education sanitaion, medical help and housing, etc., even people of low skill and low income groups may be expected to have a slightly better standard of living than what may be warranted merely by their meagre earnings.

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CONCLUDING REMARKS

The investigation thus indicates that econmic conditions differ for different occupational groups, both in rural and urban sectors of the district. For the district as a whole, on account of certain peculiar factors the living conditions may be described as being somewhat better as compared to those in some of the other districts of the State. Surat city has been one of the important trading centres of Western India for several centuries. It was an important centre of communications and a marketing centre during the days of Muslim rule and was a famous port of embarkation for pilgrim to Mecca. The first English factory was started in Surat and the city had then a very good export business. These trading activities which went on for generations naturally resulted in an accumulation of wealth in the city. Besides Surat, the towns of Navsari, Bilimora, Vyara and Bulsar have a large trade in different types of fruits and forest products which adds to the level of their income and makes possible better living conditions. Surat is also one of the most fertile districts in the country and grows in abundance a very important cash crop, namely, cotton. It has also a rich garden land, growing in plenty a variety of fruits such as mangoes, bananas, chikus, etc. These special characteristics of the rural economy of the district provide better employment opportunities for different classes of rural population. Cotton ginning and pressing, dal-making, etc. have been old industries in this area. To them are now being added several other small industries like brass and cock making, engineering, wire-drawing, etc. All this development has a favourable effect on the standard of life of both rural and urban people as it brings into existence better opportunities for earning income and lessens the chances of under-employment or unemployment.

The inhabitants of the district on the whole are industrious and enterprising. Some of them have migrated to far off lands such as Africa, Burma, England, Fiji, Islands, etc. and also to different parts of India to earn a living either as merchants and traders or as skilled craftsmen or as professionals like teachers, doctors, etc. Many of them have been very successful and have been sending fairly decent amounts of money to their families at home. Many of them, when they retire from business, bring back their saving to the mother country and settle in their original towns and villages. Incomes and wealth earned in this manner help to strengthen the economy of the district and to create better conditions of life. Even a casual visitor to the rural areas of the district will notice in not a few places well constructed modern types of houses with modern amenities. The same is in some measure true of cities. People of these district are in fact known to be inclined to incur considerable expenditure on ceremonials, festivities and gaiety. It may partly be attributed to social temparament. But evidently an equally important factor is the possession of better income and better wealth.

CHAPTER 12—ECONOMIC PROSPECTS

CONDITIONING FACTORS.

THE ECONOMIC DEVOLORMENT OF A REGION depends on a variety of factors such as availability of resources, of skilled labour supply, of financial institutions for fostering and encouraging industries and the existence of an entrepreneurial class, ready to carry out innovations. Some of these factors are variable in nature and can be influenced by various national developmental schemes. Our country has accepted the principle of balanced economic growth and has launched upon a programme of economic development by formulating and attempting to implement successive five year plans. They will necessarily raise the tempo of development in the district and to that extent, the future of the district will be shaped for the better.

Economic prospects of the district as indicated in the preceding chapters of this part seem to be bright. The possibility of the improvement of agriculture, the proposed Ukai and Kakrapar projects, planned expansion of power under South Gujarat Grid Scheme and proposed development of Surat port and Industrial Estate at Udhna are favourable factors which will be conductive to the progress of the district [1]

Multi-purpose project.

The district is rich in agricultural resources and various schemes such as Ukai and Kakrapar projetcts are to be implemented to harness them. The Ukai project which is a multi-purpose project envisages the construction of a reservoir across the river Tapi at Ukai in Songadh taluka to hold a storage of 3.25 lakhs Mcft. of water. This will be used for assuring supply to more than 5 lakh acres of seasonal irrigation planned on the Kakrapar weir and canal project and will in addition bring new areas under irrigation in the district. Moreover, this dam has great potentialities of development of cheap and economical hydro-electric power.

Major-Irrigation Project.

The Kakrapar project is the major irrigation project of the district and was taken up before the commencement of the first five year plan. The Kakrapar Head works comprising the weir, the head regulators for the canals and the afflux bunds have been completed (1958). The work on the main canals is at an advanced stage and the construction of branches, distributaries, etc. is under execution. Irrigation has already commenced in a part of the area on the left bank canal and the remaining work is expected to be completed during the second five-year plan period.

1. Following sources have been relied upon in the compilation of this chapter : (i) 'Second Five-Year Plan Bombay State' (1958) published by Government of Bombay. (ii) Small-scale Engineering Industries in Surat (1957) published by office of the Development Commissioner (small-scale Industries) Ministry of Commerce and Industry, Government of India, New Delhi, (iii) The Surat Chamber of Commerce supplement to 'The Times of India' of 15th September, 1958 and (iv) Data collected by this office.

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With availability of full irrigation facilities from this project, khariff crops will receive assured water supply and rabi crops may have a much better chance of satisfactory growth. It would also be possible to grow better varieties of cotton with higher yields and fetching better prices. These irrigational facilities after the full development of the project are expected to produce annually an additional quantity of more than one and half lakh tons of food-grains and more than fifteen thousand tons of cotton.

Besides this project which is to benefit either wholly or partially some 14 talukas of the district, there are also being implemented many minor irrigation schemes which are calculated to strengthen the agricultural base of the district.

Industrial Development.

The district has both large-scale and small-scale industries. Gold and silver thread (jari) and art silk industries are amongst the oldest industries of the district. The existence of these two industries has given rise to other subsidiary industries, prominent amongst them being the engineering units manufacturing jari machinery and parts, silk and art-silk machinery and parts, wire drawing, diamond dies, foundries, machine and repair shops. The new industry started in the district in recent times is the sugar industry. There is also expansion in the chemical industry, thanks to the starting of Atul Products Ltd. in the district. Moreover, possibilities of expanding some of the existing industries and establishing new ones seem to exist in view of favourable growth factors. Some of these industries can be referred to here : (i) art-silk industry :—its products have an expanding market both in and outside the country. With the easy availability of art-silk yarn, the industry may still expand. Indirectly, this expansion would improve the prospects of the engineering industry too ; (ii) copper electrical wire industry :—schemes envisaged in the second five year plan for increasing the total electrical power supply of the country and for electrification of rural areas will require large quantities of copper conductor wire and this will have favourable impact on the growth of industry in the district; (iii) brass cocks industry :—with implementation of water supply schemes in more towns and villages of the country additional quantities of water cocks, and taps will be needed. A large portion of this increased demand can be expected to be fulfilled by this growing industry of the district ; (iv) soap industry :—a variety of oil seeds are produced in the district and in the forest areas number of vegetable seeds are available, from which non-edible oil can be extracted. A proper survey of these resources, it is reported, may indicate the possibility of establishing soap manufacturing units ; (v) paper and card-board manufacture :—at present there are two paper and card-board manufacturing units in the district. It is believed that the plentiful supply of bamboo in the forest regions and the by-products of the sugar factories offer opportunities for its expansion ; (vi) tanning :—in view of the fact that most of the hides available from the bodies of the dead animals are cured and finished in

a very crude and unscientific manner, a case is often made out by the commercial bodies of the district for the starting of tanning factories in the district ; (vii) canning and food preservation :— the district grows in abundance a variety of fruits such as mangoes, bananas, chikoos, etc. Some of them like alphanso mangoes have export potentialities and require for that purpose proper preservation facilities which can be provided by starting a canning and fruit preservation factory at a suitable place ; (viii) sugar : one co-operative sugar factory has already started its work at Bardoli and another factory on co-operative lines is being established at Gandevi.

The development of industries in the district in this direction will be further facilitated by the availability of more power under South Gujarat Electric Grid Scheme, efficient rail and road transport system, proposed development of Surat port and the industrial estate at Udhna.

Electric Grid Scheme.

The South Gujarat Electric Grid Scheme comprises a 22.5 mw Thermal station at Utran, (near Surat city) the energy generated from which is transmitted and distributed in areas around Surat, Navsari, Bilimora and Bulsar. The purpose of the scheme is to make power available for domestic, agricultural and industrial purposes. Surat, Navsari, Bilimora and Bulsar licensees came to be connected with the Grid in 1952 and restrictions as regards power supply were removed in the same year. This has given great impetus to the development of small-scale industries in the district and has facilitated the implementation of rural electrification programmes. These programmes aim at giving benefits of an indirect nature such as uplifting of villages, encouragement to lift irrigation and development of cottage and small-scale industries. The total number of villages benefited by these programmes was 58 on March 31, 1958 and further investigations as regards electrifying many more villages from the point of view of agricultural and industrial load potential are being carried out.

Surat port.

It is a historical fact that Surat was an important port during the Moghul period. With the development of Bombay and due to other commercial and economic factors the importance of this port gradually declined but efforts are now being made to revive it to some extent. It is reported that even now cargo worth over 60 lakhs of rupees is handled at this port every year and that the volume of this cargo comes to 34,000 tons per annum. It is estimated that with better port and storage facilities, it will be big enough to handle four times its present volume of cargo. A hydrographic survey was undertaken recently and as a result of it, a site near Gaviar was found suitable for a new port. The survey revealed that the only impediment for navigation from the sea to the proposed port-site for all the days in a year was the big sand-bar at the mouth of the river. It is reported that necessary steps will be taken for removal of this bottleneck.

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Industrial Estate.

In this age of socio-economic planning, a planned development of industries is desirable. The Government of India in their second five year plan have accepted the policy of establishing industrial estates for planned growth of small-scale industries in the country and Udhana, near Surat, has been selected for this purpose. Udhna station, which is also a railway junction, is connected with important industrial markets of the country such as Bombay, Delhi, Calcutta and Madras by railways and will be nearer to the area of Saurashtra after the full development of Surat port. The development of the estate is aimed at relieving the congestion in the city and making it possible for industrial units to reap the advantages of modern scientific planning in production and marketing.

The total outlay for this proposed estate, which measures approximately 200 acres, is estimated to be Rs. 2 crores. It will provide accommodation for some 200 small-scale units. Its *'khat-muhurat'* ceremony was performed in 1957 and since then some of the proposed construction activities on the estate have started. The estate will be managed by Udhna Udyognagar Sahakari Sangh Ltd., which will provide common facilities such as roads, water supply, electric power, etc.

In view of these existing and proposed developments in the fields of agriculture, industry, transport and electricity generation, the economic future of the district, can legitimately be considered to be fairly bright.

UDHANA INDUSTRIAL ESTATE



PART V

PUBLIC ADMINISTRATION

CHAPTER 13—ADMINISTRATIVE STRUCTURE

INTRODUCTION

CHAPTER 13. Administrative Structure. INTRODUCTION.

PUBLIC ADMINISTRATION IN THE STATE in the last century consisted mostly in providing security of person and property and raising the revenue necessary for the purpose. In other words, Police, Jails and Judiciary representing security, and Land Revenue, Excise, Registration and Stamps representing revenue formed the most important departments of the State. The Public Works Department was the only other branch of sufficient importance, but its activities of construction and maintenance were, apart from roads and irrigation works, confined to buildings required for the departments of Government. With the spread of Western education and the growth of political consciousness in the country, and as a result of the gradual association of a few Indians with some aspects of the work of Government the demand arose for the expansion of governmental activities into what were called "nation-building" departments, namely Education, Health, Agriculture, Co-operation, etc.

In the twenties and thirties of this century, after the introduction of the Montagu-Chelmsford Reforms a greater emphasis came to be laid on the development of these departments. When, as a result of the Government of India Act of 1935, complete popularization of the Provincial Government took place in 1937, the new Government attempted not only to expand the "nation-building" departments but also to take steps in the direction of creating what has now come to be generally described as a welfare State. After the close of World War II and the attainment of independence by India in 1947, an all-out effort is being made to achieve a welfare State as rapidly as possible and to build up a socially directed economy.

The present activities of the State, therefore, require a much more elaborate system than what was felt to be necessary during the nineteenth century.

In the descriptions that follow in this chapter and in chapters 14 to 18, the departments of the State operating in Surat district have been grouped into six categories, composed as follows :—

Chapter 13—Administrative Structure.—Land Revenue and General Administration* and Local Self-Government.

Chapter 14—Justice and Peace.—Judiciary, Police, Jails, and Juveniles and Beggars.

*This is composed of the Collector and his subordinate officers.

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Chapter 15—Revenue and Finance.—Land Records, Sales Tax, Registration, Stamps and Motor Vehicles.

Chapter 16—Development Departments.—Agriculture, Veterinary, Forests, Co-operation, Industrial Co-operative and Village Industries, Industries, Public Works and Road Transport.

Chapter 17—Welfare Departments.—Education, Technical and Industrial Training, Medical, Public Health, Labour, Prohibition and Excise, Backward Classes, the Charity Commissioner and Community Projects and National Extension Service.

Chapter 18—Miscellaneous Departments.—Town Planning and Valuation, Publicity, and Administration of Managed Estates.

Land Revenue and General Administration

LAND REVENUE AND GENERAL ADMINISTRATION.

The Surat district formerly consisted of only nine talukas and and petas, covering an area of 1,695 sq. miles. As a result of the merger of States in 1949, the former princely States of Bansda, Sachin and Dharampur, the Navsari district of the former Baroda State, twenty-four villages of Broach district and four villages of the Dangs district were added to it, and at the same time five villages from Surat district were transferred to the neighbouring districts, two to Nasik and three to the Dangs. According to the Census of 1951, the district covered an area of 4,499.1 sq. miles* and had a population of 18,27,842. The district is now divided into four prants, comprising fifteen talukas and three petas, as shown below :—

Administrative Divisions of Surat District

(With area, number of villages and towns, and population according to Census of 1951)

Division	Name of taluka or peta	Area in sq. miles	Number of villages	Number of towns	Population
Bulsar ...	Bulsar	..* 201.8	91	1	1,37,958
	Chikhali	.. 237.6	87	--	1,23,872
	Dharampur	... 574.6	238	1	1,12,109
	Pardi	... 162.2	82	—	1,10,636
Navsari ...	Navsari	... 283.1	139	1	1,99,165
	Bansda	.. 234.1	92	1	63,965
	Gandevi	.. 121.8	55	2	1,09,371
	Mahuwa	... 137.9	66	—	54,151
Surat ..	Chorasi	.. 221.1	108	3	3,49,032
	Kamrej	... 147.0	69	1	51,918
	Mangrol	. 293.5	150	—	74,202
	Olpad	... 264.8	102	—	64,568
	Palsana	... 57.6	49	--	35,374
Vyara ...	Vyara	. 316.6	147	1	89,949
	Bardoli	... 156.8	81	2	78,283
	Mandvi	... 276.5	136	1	75,205
	Songadh	.. 298.7	206	1	61,905
	Valod	... 77.9	40	—	36,179
	Total	... 4,066.6	1,938	15	18,27,842

* The area figure of the district of Surat supplied to the Census authorities by the Surveyor General of India was 4,499.1 square miles. The area figures given by the Census authorities, which are reprodued in this table were obtained by the Census authorities from the District Inspector of Land Records or from local records.

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LAND REVENUE AND GENERAL ADMINISTRATION

Collector.

The Collector is the pivot on which the district administration turns. Not only is he at the head of the Revenue Department in the district, but, in so far as the needs and exigencies of the district administration are concerned, he is expected to superintend the working of the officers of other departments and run the administration under the control of the Divisional Commissioner, Baroda Division.

(*i*) *Revenue*.—The Collector is the custodian of Government property in land (including trees and water) wherever situated, and at the same time the guardian of the interests of members of the public in land so far as the interests of Government in land have been conceded to them. All land, wherever, situated, whether applied to agricultural or other purposes, is liable to payment of land revenue, except in so far as it may be expressly exempted by a special contract (*vide* section 45, Land Revenue Code). Such land revenue is of three kinds : (1) agricultural assessment, (2) non-agricultural assessment, and (3) miscellaneous. The Collector's duties are in respect of (*a*) fixation, (*b*) collection and (*c*) accounting of all such land revenue. The assessment is fixed on each piece of land roughly in proportion to its productivity. This assessment is revised every thirty years taluka by taluka. A revision survey and settlement is carried out by the Land Records Department before a revision is made, and the Collector is expected to review the settlement reports with great care. The assessment is usually guaranteed against increase for a period of thirty years. Government, however, grant suspensions and remissions in bad seasons as a matter of grace, and the determination of the amount of these suspensions and remissions is in the hands of the Collector. As regards non-agricultural assessment, section 48 of the Code provides for alteration of the agricultural assessment when agriculturally assessed land is used for a non-agricultural purpose. In the same way, unassessed land used for a non-agricultural purpose is assessed to non-agricultural rates. All this has to be done by the Collector according to the provisions of the rules under the Land Revenue Code. Miscellaneous land revnue also has to be fixed by the Collector according to the circumstances of each case, when Government land is temporarily leased. It is also realised by sale of earth, stones, usufruct of trees, etc. in Government land.

The collection of land revenue rests with the Collector, who has to see that the revenue due is recovered punctually and with the minimum of coercion, and that the collections are properly credited and accounted for.

The Collector is further responsible for the collection of fees and taxes under various other Acts, such as the Bombay Irrigation Act (VII of 1899), the Indian Stamp Act (II of 1899), the Indian Court-fees Act (VII of 1870), the Bombay Tolls on Roads and Bridges Act (III of 1875), the Bombay Entertainments Duty Act (I of 1923), and the Bombay Prohibition Act (XXV of 1949). There are also other revenue acts which contain a provision that

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dues under them are recoverable as arrears of land revenue, and the Collector and his establishment have to undertake the recovery of such dues when necessary.

In regard to the administration of the Forest Act, the ultimate responsibility for the administration of the department, so far as his district is concerned, lies with the Collector, and the Divisional Forest Officer is assistant for the purpose of that administration, except in matters relating to the technique of forestry.

As regards the Prohibition Act, the Collector has to issue personal permits to liquor and drug addicts and recover the assessment fees from shops permitted to sell liquor and drugs. The Collector of Surat is the Chairman of the Prohibition Committee of the district. In fact, he is the agency through which the Director of Prohibition and Excise arranges to have the policy of the department carried out.

The administration of the Bombay Tenancy and Agricultural Lands Act (LXVII of 1948), rests with the Collector, but with the recent creations of a post of Additional Collector, this work with other revenue work of the district has been entrusted by Government to the Additional Collector. The Collector is also an appellate authority to hear appeals under the various sections of the Act.

(*ii*) *Inams.*—As a legacy of former Governments, alienations of land revenue had taken place in regard to large areas of land in the district. There were also cash allowances settled under various Acts. Most of the inami tenures prevalent in the old Surat district (*i. e.* before the merger) have by now (1957) been abolished under various Inams Abolition Acts in pursuance of a new land reform policy. The only inams that survive now are Devasthan inams and service inams for village servants useful to Government. Out of the inams prevalent in the area of merged states all alienations, excepting Devasthan inams, inams of village servants useful to Government and revenue free lands granted for charitable purposes, such as schools, hospitals, etc., have been extinguished. The service Inams useful to community have now been resumed in the pre-merged Bombay State areas with effect from December 1, 1954 under the Bombay Service inam useful to community (Gujarat and Konkan) Resumption Rules, 1954. It is the duty of the Collector to see that the conditions under which the still existing inams are continuable are observed and they are continued only to persons or institutions who are entitled to hold them.

(*iii*) *Public Utility.*—The Agriculturists' Loans Act (XII of 1883) and the Land Improvement Loans Act (XIX of 1883), regulate the grant of loans to agriculturist at cheap rates for financing their operations. The Collector has to estimate the

needs of his district in accordance with the policy of Government for the time being and, in the event of a bad season, to make further demands for as much money as can be usefully loaned for the purpose of tiding over the scarcity. He has to take necesary steps for the most advantageous distribution of the amount placed at his disposal and to see that the advances made are recovered at the proper time.

(*iv*) *Accounts.*—The Collector is in charge of the Treasury and is personally responsible to Government for the due accounting of all moneys received and disbursed and for the safe custody of cash, notes, stamps, opium, securities and other Government property.

As the Collector's delegate and representative, the Treasury Officer is responsible to the Collector for the right discharge of his duties.

In the matters of accounts and audit the Collector, with the Treasury Officer under him, is responsible to the Accountant General whose instructions he has to obey.

The District Treasury has been separated from Revenue Department with effect from April 1, 1955. The non-treasury items such as work of preparation of pay-bills of District Establishment of Revenue Department, Government Provident Fund budget which was dealt with by the District Treasury is now being done by the Revenue Accounts Branch newly created in the Revenue Department. This branch is being supervised by the special officer for Surat city work. A post of new city Survey Officer has been created for Surat city survey work which was being done by the Huzur Deputy Collector before the separation of Treasury.

(*v*) *Quasi-judicial functions in revenue matters.*—Among the quasi-judicial functions of the Collector on the revenue side, apart from hearing appeals from the Prant Officers under the Land Revenue Code and various other Acts, may be mentioned : (i) The revisional powers exercised under section 23 of the Bombay Mamlatdar's Courts Act (II of 1906), in respect of Mamlatdars' orders under the Act. (This power is delegated to an Assistant or Deputy Collector), (*ii*) Appellate powers under sections 53 and 67 of the Bombay Irrigation Act (VII of 1879), (iii) The work which the Collector does in connection with the execution of Civil Courts' decrees, (iv) Proceedings and awards under section 11 of the Land Acquisition Act (I of 1894).

(*vi*) *Local Self-Government.*—In all cases in which the power of passing orders in matters affecting local bodies rests with the Director of Local Authorities or Government, either the proposals are made by the Collector or they are received by the Director of Local Authorities with the Collector's remarks. The Collector is entrusted with holding the triennial elections and bye-elections of local bodies, including panchayats. The control sections of the various acts governing local bodies give authority to the

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Collector as the Chief representative of Government to supervise the action of local bodies and to give advice.

(*vii*) *Officers of other Departments.*—The officers of other departments stationed at the district headquarters can be divided into two group: (A)—(1) The District and Sessions Judge, (2) the District Superintendent of Police, (3) the Divisional Forest Officer, (4) the Executive Engineer, (5) the Civil Surgeon, and (6) the District Inspector of Prohibition and Excise. (B)-(1) The Administrative Officer, District School Board, (2) the District Agricultural Officer, and (3) the Inspetctor of Sanitation and Vaccination.

(A)-(1) The District Judge has a separate and independent sphere of work, and as Sessions Judge he exercises appellate powers over the decisions of all judicial magistrates in the district. The Bombay Separation of Judicial and executive Functions Act (XXIII of 1951) was enacted to meet a long-standing and widespread desire for the separation of the judiciary from the executive officers. It has divided the magistracy into "judicial magistrates"; who are subordinates of the of the Sessions Judge, and executive magistrates", who are subordinates of the Distratc Magistrate. Before the enactment of this legislation the Sessions Judge usee to exercise appellate powers over the decisions, in criminal cases, of the District Magistrate and other first class magistrates. It has withdrawn from the executive magistrate practically all powers of trial of criminal cases, and only in certain cases the Sessions Judge to hear appeals from the decision of executive magistrates.

(2) The District Superintendent of Police and the Police force of the district are under the control of the District Magistrate, in so far as their functions regarding maintenance of law and order are concerned. As regards discipline, training and other administrative matters they are under the control of the Range Deputy Inspector General of Police.

(3) The Divisional Forest Officer is regarded as the Collector's assistant in regard to forest administration.

(4) The Executive Engineer stands a little apart. Since his work is technical, he is not directly subordinate to the Collector, though in a sense he plays a part subsidiary to the general administration of the district, of which the Collector is the head, and he is expected to help the Collector whenever required to do so. The Collector can ask him to investigate the utility of minor irrigation works likely to be agriculturally useful in the district. According to section 11 of the Bombay Famine Relief Code, the Executive Engineer arranges, in consultation with the Collector, for the inclusion, in the programme of expansion of public works, of the plans for special and current repairs to roads and other useful works suitable as scarcity works. The programme of famine relief works is also prepared quinquennially

by the Executive Engineer in consultation with the Collector. When the time for actual opening of any work comes, the Collector can requisite the services of the Executive Engineer for making immediate arrangements for procuring the necessary establishment, tools, plant, building materials, etc. (Famine Relief Code, section 81).

(5) The Civil Surgeon has also a separate and independent sphere of his own but must place his professional and technical advice and assistance at the disposal of the general district administration whenever required.

(B) The officers in this group are all of subordinate status. Their services in their particular sphere can be requisitioned by the Collector either directly in case of necessity if the matter is urgent, or through their official superiors.

The District Inspector of Prohibition and Excise is subordinate to the Collector except in technical mattrers.

The following are some of the officers of the district who have more or less intimate contact with the Collector in matters relating to their department and have to carry out his general instruction :-

(1) The District Industrial Officer, (2) the Assistant Director of Backward Class Welfare, (3) the Medical Officers at the various taluka centres (4) the District Health Officer, (5) the Compost Development Officer (through the District Development Board), (6) the Divisional Veterinary Officer, (7) the Distritt Inspector of Land Records, (8) the District Officer, Industrial Co-operative and Village Industries, (9) the District Co-operative Officer, and (10) the Assistant Marketing Inspector.

The Regional Transport Officer is an officer whose work in the district has to be conducted in consultation with the Collector.

(viii) *As District Magistrate.* -The Collector's duties as District Magistrate are mostly executive. He is at the head of all other executive magistrates in the district. As District Magistrate, besides the ordinary powers of a Sub-Divisonal Magistrate, he has to following powers among others : --

(1) power to hear appeals *from* orders requiring security for keeping the peace or good behaviour (section 406, Criminal Procedure Code) ;

(2) power to hear appeals *from* orders of magistrates refusing to accept or reject sureties (section 406-A) ;

(3) power to call for records from any subordinate executive magistrate (section 435) ;

(4) power to issue commission for examination of witnesses (sections 503 and 506) ; and

(5) power to hear appeals *from or* revise orders passed by subordinate executive magistrates under section 514—procedure on forfeiture of bond (section 515).

When authorised by the State Government, the District Magistrate may invest any magistrate subordinate to him with—

(1) power to make orders prohibiting repetitions of nuisances (section 143) ;

(2) power to make orders calculated to prevent apprehended danger to public peace (section 144) ; and

(3) power to hold inquests (section 174).

Besides being in control of the police in the district the District Magistrate has extensive powers under the Criminal Procedure Code, the Bombay Police Act (XXII of 1951), and other Acts for maintenance of law and order. He has also to supervise the general administration of these Acts, to inspect factories and magazines, and to perform various other supervisional functions.

In his executive capacity, the District Magistrate is concerned with the issue of licences and permits under the Arms Act (II of 1878), the Petroleum Act (VIII of 1899), the Explosives Act (IV of 1884), and the Poisons Act (II of 1904). He has also to supervise the general administration of these Acts.

(*ix*) *As District Registrar.*—As District Registrar the Collector controls the administration of the Registration Department within his district.

(*x*) *Sanitation and Public Health.*—The duties of the Collector in the matter of sanitation are : (a) to see that ordinary and special sanitary measures are initiated in cases of outbreaks of epidemic deseases ; (b) to watch and stimulate the efficiency of the sanitary administration of municipalities and other sanitary authorities ; and (c) to advise and encourage local bodies to improve the permanent sanitary conditions of the areas under them so far as the funds at their disposal allow. He can freely requisition the advice and technical assistance of the District Health Officer and the Assistant Director of Public Health, Northern Registration District, in this regard.

(*xi*) The Collector of Surat is the Court of Wards for the estates taken over under the Bombay Court of Wards Act (I of 1905). He has appointed a Manager to superintend these estates.

District Development Board.—Prior to 1952 there was a District Rural Development Board. The District or Divisional Officers of various departments concerned with the rural development members of the State Legislature and other representatives of the rural areas constituted the District Rural Development Board. It functioned from 1939 to 1952. The Colletor was the ex-officio Chairman of the District Rural Development Board.

With a view to co-ordinating the activities of the various non-statutory boards and committees in the District the former District Rural Development Board was reconstituted in September 1952 as District Development Board by amalgamating all existing non-statutory Boards and committees with it. The District Development Board deals with rural development and such other matters as were entrusted to the various Boards and Committees prior to their amalgamation with the District Development Board. The constitution of the District Development Board is as under :—

(*a*) There are 69 members of the Board.

(*i*) 26 District or Divisional Officers.

(*ii*) 15 members of Legislative Assembly.

(*iii*) Two Members of Legislative Council.

(*iv*) Three Members of Parliament.

(*v*) President, District Local Board, Surat.

(*vi*) Chairman of District Co-operative Bank, Surat.

(*vii*) Two Representatives of Co-operative Societies.

(*viii*) Chairman, District School Board, Surat.

(*ix*) Eighteen other non officials.

(*b*) The Collector is the ex-officio Chairman of the District Development Board.

(*c*) The Vice-Chairman of the District Development Board is the Chairman of all sub-Committees except the District Anti-corruption and the Police Advisory Sub-Committee of which the Collector is the chairman.

(*d*) (*i*) A non-official member is appointed as the Honorary Secretary of the District Development Board. He is the member of all sub-committees of the Board.

(*ii*) Assistant Secretary in the Mamlatdar's rank has been appointed and he is assisted by a small staff for carrying out the administration of the Board.

(*e*) The details of sub-committees and their functions are as under :—

Sub-Committees Of The District Development Board, Surat

S. No.	Name of sub-committee	No. of members (excluding Hon. Secretary and Co-opted. members but including the Vice Chairman of the Board.)	Nature of works entrusted in brief
1	2	3	4
1.	Agricultural and Rural Development Works Sub-committee.	8	(1) Agricultural and Rural works. (2) Distribution of controlled articles. (3) Planning. (4) Kharlands. (5) Forests. (6) Recruitment and displaced person (7) Any other subject which crop us hereafter.
2	Minor Irrigation roads and water supply sub-committee.	8	(1) Minor irrigation roads and water supply. (2) Public works. (3) Famine Relief. (4) Low income group housing scheme. (5) Emergency relief organization.
3.	Dist. N. E. S. and C.D. Advisory Committee.	21	(1) National Extension Service and Community Development.
4.	Prohibition and publicity iub-committee.	8	(1) Prohibition and welfare works of prohibition effected persons. (2) Publicity. (3) Co-ordination and organization.
5.	Backward class welfare sub-committee (social welfare sub-committee).	8	(1) Amelioration of the condition of back ward classes.
6.	Co-operation and Marketing Sub-committee.	8	(1) Co-operation and Marketing.
7.	General Welfare and Health Sub-Committee.	8	(1) General Welfare and Health.
8.	Social Education and Sports Festival sub-committee.	8	(1) Social Education (2) Sports festivals.
9.	Agricultural Research and Social Conservation sub-committee.	8	(1) Agricultural research. (2) Soil conservation. (3) Land.
10.	Police Advisory sub-committee.	8	(1) Police and anti-corruption.
11.	Village Panchayat sub-Committee	8	(1) Establishment of new village panchayats. (2) Execution of board policies of Govt.

(f) All sub-committees have power to co-opt one member on them, with the exception of the Police Advisory Sub-Committee which has power to co-opt two members on it.

Supply work.—Controls came along with World War II. Food grains, iron and steel, cement, cotton, sugar and other essential articles were put under controlled supply. Even compulsory procurement was resorted to in the case of food grains. But with restoration of normal supplies, procurement and rationing of food grains and sugar were removed. However, shortage of supplies still (1957) prevails in regard to cement and iron and steel.

The Collector is the pivot of the district administration in supply matters. Along with his other duties he has to work as the principal civil supply officer in the district.

Collector's Office

Collector's Office:—The Collector's Office at Surat is divided into many branches, each of which is usually in charge of a person in the grade of Mamlatdar or Aval Karkun. With the recent creation of the post of Additional Collector some of the work in the said branches has been entrusted by Government to the Additional Collector. These branches also work under the Personal Assistant to the Collector who is of a Deputy Collector's grade. A post of additional Chitnis in the Mamlatdar's grade has been created for attending to to tenancy work under the Additional Collector.

The chitnis branch deals with matters like land revenue, land grants, watans, cash allowances, establishment, encroachments, reclamation of khar lands, audit of village accounts (*Jamabandhi* audit) inspection of talukas and public offices, working of Court of Wards Act and Requisition Act.

The head clerk branch deals with the District Local Board, municipalities and village panchayats, prohibition and excise, public works, medical affairs, telephones, stamp duty, backward class matters, execution of decrees of civil courts (*darkhasts*) work regarding Five Year Plan etc.

The deputy chitnis branch deals with all magisterial work, the administration of the Bombay Entertainments Duty Act (I of

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1923), the Arms Act (XV of 1878), political work connected with the maintenance of law and order, and passport.

The evacuee section of deputy chitnis branch deals with matters regarding the Evacuee Property Act. This is a temporary section.

The money-lending branch was dealing with the Administration, of Money lenders' Act, 1946 along with other work *e.g.*, Tagai Agriculture, Bombay Agriculturists, Debtors Relief Act, Bombay Agricultural Produce Market Act etc., but now the work regarding the administration of Bombay Money lenders Act has been transferred to the Co-operative Department. The remaining work continues to be dealt with by the Chitnis branch.

The District Registration Office is one of the branches and is in charge of the Headquarters Sub-Registrar.

There are separate branches dealing with each of the following: (1) the District Development Board, (2) the District Soldiers', Sailors' and Airmen's Board, and (3) The Election Branch. There are branches dealing with refuges, but these are on a temporary basis.

There is also a special land acquisition branch consisting of four officers *viz.*, one of District Deputy Collector's grade and two of Mamlatdar's grade with other office staff dealing specially with acquisition of lands for 'Tapi Canal' for doing the works of acquisition of land for other purposes in the District, the post of the special Land Acquisition Officer has been created in Mamlatdar's grade.

Prant officer

The Prant Officers:—Under the Collector are the Prant Officers who are either Assistant Collectors (Indian Administrative Service Officers) or District Deputy Collectors (Members of the Bombay Civil Service). The other four prants in the district have each a separate Prant Officer in charge. The Prant Officers have their headquarters at Surat, Navsari, Vyara and Bulsar.

The Prant Officers form the connecting link between the Mamlatdar and the Collector. A Prant Officer exercises all the powers conferred on the Collector by the Land Revenue Code

and by any other law in force or by executive orders, in regard to the talukas and mahals in his charge, except such powers as the Collector may specially reserve to himself. His principal functions in regard to his sub-division are :—

(*i*) *Revenue.*—(1) Inspection and supervision of the work of Mamlatdars, Circle Officers, Circle Inspectors and Village Officers, including the inspection of taluka *kacheries.*

(2) Appointments, transfer, etc., of stipendiary village officers and the appointment, etc., of hereditary village officers.

(3) Safegaurding Government property by constant inspection, dealing with encroachments, breaches of the conditions on which lands is held on restricted tenure, etc.

(4) Grant of waste land and disposal of alluvial land.

(5) Levy of non-agricultural assessment and passing orders regarding miscellaneous land revenue.

(6) Hearing of appeals against Mamlatdar's decisions in assistance suits and watching the execution of assistance decrees.

(7) Crop and boundary mark inspection and the checking of annewaris (*Anevaris*), *i.e.*, estimates of crop yields for purposes of suspensions and remissions of revenue, and the record of rights.

(8) Hearing of appeals against Mamlatdar's and Mahalkaris' decisions in cases under the Bombay Tenancy and Agricultural Lands Act.

(9) Supervision over the realisation of Government revenue.

(10) Successions to watans and other properties.

(11) Land acquisition.

(*ii*) *Magisterial.*—The Prant Officer is the sub-Divisional Magistrate of his charge and as such exercises the powers specified in Part IV of Schedule III of the Criminal Procedure Code. These include the ordinary powers of a Taluka Magistrate and also the power to require security to keep the peace (section 107); power to require security for good behaviours under sections 108, 109 and 110; power to make orders calculated to

prevent apprehended danger to public peace (section 144); power to record statements and confessions during a police investigation (section 164); and power to hold inquests (section 174). The Sub-Divisional Magistrate, when empowered by the State Government has power also to call for and forward to the District Magistrate records and proceedings of subordinate executive magistrates.

As Sub-Divisional Magistrate the Prant Officer is required to inspect police sub-inspector's offices from much the same point of view from which the District Magistrate is required to do

(*iii*) *Other Duties:*—Among the other duties of the Prant Officer may be mentioned :—

(1) keeping the Collector informed of what is going on in his sub-division not only from the revenue point of view but also in matters connected with law and order.

(2) forest settlement work.

(3) grant of tagai loans.

The Prant Officer helps the Collector in the work of food grain distribution in is prant.

Each Prant Officer is assisted in his work by a Shirastedar and about five clerks.

Mamlatdars and Mahalkari

The Mamlatdars (*and Mahalkaris*).—The Mamlatdar is the Officer in executive charge of a taluka, and the Mahalkari has the executive charge of a mahal. There is a sub-treasury in every taluka or mahal and this is in charge of the Mamlatdar or Mahalkari. There is practically no difference in kind between the functions and duties of a Mamlatdar and those of a Mahalkari. Each taluka or mahal has on the average two or three head karkuns (or *aval* karkuns), 15 to 18 clerks, 60 talathis, two circle officers and two circle inspectors. The duties of Mamlatdars and Mahalkaris fall under various heads. With a view to helping the Mamlatdars and Mahalkaris for the implementation of the Tenancy Act and Rules thereunder including the trial of tenancy suits, special staff has been appointed in all the talukas and mahals in the grades of Mahalkaris and Aval Karkuns. These officers are also delegated with the powers under the Land Revenue Code for the proper implementation of the provisions of the Act in the talukas and mahals concerned.

(i) *Revenue* :—The Mamlatdar's revenue duties are to prepare the ground work for the Prant Officer and the Collector to pass their orders upon. His report is called in almost all revenue matters. When those orders are passed he has to execute them.

In regard to the annual demand of land revenue he has to get ready all the statements necessary for what is called the making of the *jamabandi* of the taluka, by the Collector or Prant Officer. The *jamabandi* is an audit of the previous year's accounts. The demand for fixed agricultural revenue is settled, but there are remissions and suspensions to be calculated upon that fixed demand in loan years. Remissions and suspensions are given in accordance with the crop annewaris (*anevaries*), with the determination of which the Mamlatdar is most intimately, concerned. To the demand of fixed revenue is added the amount of non-agricultural assessement and of fluctuating land revenue, such as that arising from the sale of trees, stone or sand, fixed when individuals apply for them.

The burnt of the work of collection also lies on the Mamlatdar. He can issue notices under section 152, Land Revenue Code, inflict fines for delay in payment under section 148, Land Revenue Code, distrain and sell movable property, and issue notice of forfeiture of the land, though he has to take the Prant Officer's or the Collector's orders for actual forfciture,

He has also to collect, in addition to land revenue, tagai-loans, pot hissa measurement fees, boundary mark advances, and irrigation revenue, the dues of other departments like Sales Tax, Income Tax and Forest department when there is default in payment, at the request of the departments to recover the dues as an arrear of land revenue, fees, toll or ferry farm dues, irrigation revenue, forest grazing fees, income-tax, co-operative credit societies dues and *tagai* dues.

He has to make inquiries and get ready materials on which the Prant Officer has to pass his own orders under the Bombay Hereditary Offices Act (III of 1874). He can himself pass orders as to the appointment, remuneration, period of service, suspension and fining of inferior village servants, the grant of leave of absence to them etc. [section 64(3) of the Hereditary Offices Act].

Applications for grant of *tagai* are generally received by the Mamlatdar, who has to get inquiries made by the Circle Officer or Circle Inspector, see the sites for the improvement of which *tagai* is sought, ascertain whether the security offered is sufficient, determine what instalments for repayment would be suitable, etc. He can himself grant *tagai* up to Rs. 1,000 and Rs. 200 under the Land Improvement Loans Act and the Agricultural Loans Act respectively. A Mamlatdar who has been specially empowered can grant *tagai* up to Rs. 2,500 and Rs. 500 under the Land Improvement Loans Act and the Agricultural Loans Act respectively. In other cases, he has to obtain the Prant Officer's or the Collector's orders.

The Mamlatdar's duties regarding *tagai* do not and with the giving of it; he has to see that it is properly utilised,

inspect the works undertaken by its means, watch the payment, and make recoveries from defaulters. The Mamlatdar is primarily responsible for the administration of the Bombay Tenancy and Agricultural Lands Act (LXVII of 1948) within the area of his charge. Some of his powers under the Act have been delegated to the Aval Karkuns.

(ii) *Quasi-Judicial* :—The quasi-judicial duties which the Mamlatdar performs include : (1) inquiries and orders under the Mamlatdars' Courts Act (II of 1906) : (2) the execution of civil court decrees ; (3) the disposal of applications from superior holders for assistance in recovering land revenue from inferior holders ; and (4) enquiry in respect of disputed cases inconnection with the record of rights in each village. The last two are summary enquiries under the Land Revenue Code.

(iii) *Magisterial* :—Every Mamlatdar is the ex-officio Taluka Magistrate of his taluka. As Taluka Magistrate, First Class, he has the following among other powers under the Criminal Procedure Code :—

(1) power to command unlawful assembly to disperse (section 127).

(2) power to use civil force to disperse unlawful assembly (section 128).

(3) power to require military force to be used to disperse unlawful assembly (section 130).

(4) power to apply District Magistrate to issue commission for examination of witness (section 506).

(5) power to recover penalty on forfeited bond (section 514) and to require fresh security (section 514-A).

(6) power to make order as to disposal of property regarding which an offence is committed (section 517).

(7) power to sell property of a suspected character (section 525).

If authorised by the State Government or the District Magistrate, the Taluka Magistrate may exercise the following among other powers :—

(1) power to make orders prohibiting repetitions of nuisances (section 143).

(2) power to make orders calculated to prevent apprehended danger to public peace (section 144).

(3) power to hold inquests (section 174).

The Mamlatdar is also in charge of the management of the sub-jail. He has to keep the District Magistrate and the Sub-

Divisional Magistrate informed of all criminal activities in his charge, taking steps incidental to the maintenance of law and order in his charge. In a case of serious disturbance of the public peace the Mamlatdar carries great responsibility, for, as the senior executive magistrate on the spot, he must issue orders and carry on till his superior arrives. The special officer appointed for Surat City Survey work is also invested with the powers of the Sub-Divisional Magistrate for Surat City.

(iv) *Treasury and Accounts* :—As Sub-treasury Officer the Mamlatdar is in charge of the taluka treasury, which is called "sub-treasury" in relation to the District Treasury. Into this treasury all moneys due to Government in the taluka—land revenue, forest, public works and other receipts—are paid and from it nearly the whole of the money expended for Government in the taluka is secured. The sub-post offices in the taluka receive their cash for postal transactions from the sub-treasury and remit their receipts to it. The Sub-Treasury Officer pays departmental officers on cash orders or demand drafts issued by Treasury Officers and on cheques, except where certain departments are allowed to present bills direct at the Sub-Treasury. The Sub-Treasury Officer also issues Government and bank drafts.

When the Mamlatdar is away from his headquarters, the Treasury Head Karkun is *ex-officio* in charge of the Sub-Treasury and of the account business, and he is held personally responsible for it. During the Mamlatdar's presence he is authorised to sign receipts irrespective of the amount.

The Taluka Sub-Treasury is also the local depot for stamps-general, court-fee and postal—of all denominations and for the stock of opium held there for sale to permit holders. A few sub-treasuries have been specially authorised to discontinue the maintenance of a stock of postal stamps. In such cases, the sub-post office at the taluka headquarters is supplied with postal stamps from the post offices at the district headquarters.

A currency chest is maintained at almost all sub-treasuries in which surplus cash balances are deposited. From it withdrawals are made to replenish sub-treasury balances whenever necessary. Sub-treasuries are treated as agencies of the Reserve Bank for remittance of funds.

The Mamlatdar has to verify the balances in the Sub-Treasury, including those of stamps and opium, on the closing day of each month, which for the convenience of the District Treasury is fixed on the 25th of all months, except February, when it is the 23rd, and March, when it is the 31st, the latter being the closing day of the financial year. The report of the verification, together with the monthly returns of receipts under different heads, has to be submitted by the Mamlatdar to the Treasury Officer

at Surat. The sub-treasuries are annually inspected by either the Collector or the Prant Officer. Due to the separation of the Treasury, there is no change so far as the sub-treasury working is concerned. The Treasury Officer has, however, to inspect the sub-treasuries.

(v) *Other Administrative Duties* :—The Mamlatdar is the pivot of the administration in his taluka. He is responsible to the Collector and the Prant Officer whom he must implicitly obey and keep constantly informed of all political happenings, outbreaks of epidemics and other matters affecting the well-being of the people, such as serious maladministration in any department or any hitch in the working of the administrative machine.

He must help and guide officers of all departments in the execution of their respective duties in so far as his taluka is concerned. In fact, he is the hand-maid of them and the connecting link between the officers and the public whom they are all meant to serve. This is particularly so in departments which have not a local taluka officer of their own. The Mamlatdar is also responsible for the cattle census, which really comes under the purview of the Agricultural Department. The Co-operative Department expects the Mamlatdar to propagate co-operative principles in his taluka. He has to execute the awards and decrees of societies in the taluka, unless there is a special officer appointed for the purpose. He has to take prompt action in respect of epidemics and to render to the Assistant Director of Public Health and his assistants every help in preventing outbreaks of epidemic diseases and suppressing them when they occur.

Under executive orders the Mamlatdar has to provide the Military Department with the necessary provisions and conveyances when any detachment marches through the taluka.

The Mamlatdar's position in relation to other taluka officers, e.g., the sub-inspector of police, the sub-registrar, the range forest officer, the sub-assistant surgeon and the prohibition official is not definable. They are not subordinate to him except perhaps in a very limited sense but are grouped round him and are expected to help and co-operate with him in their spheres.

Though the Mamlatdar is not expected to work directly for local self-governing bodies, he is usually the principal source of the Collector's information about them. He is responsible for the administration of his taluka just as the Collector is responsible for the district.

In relation to the public well-being, the Mamlatdar is the local representative of Government and performs generally the same functions as the Collector.

Circle officers and Circle Inspectors

Circle Officers and Circle Inspectors :—In order to assist the Mamlatdar in exercising proper supervision over the village officers and village servants and to make local enquiries of every kind promptly, Circle Officers in the grade of Aval Karkuns and Circle Inspectors in the grade of Karkuns are appointed. The Circle Officer certifies entries in the record of rights, and thus relieves the Mamlatdar of a good deal of routine work. There are from 30 to 50 villages in charge of a Circle Officer or Circle Inspector. These officers form a link between the Mamlatdar and the village officers. There are generally two Circle Officers and two Circle Inspectors in each taluka. Their duties relate to :—

(1) boundary mark inspection, inspection of crops including the estimating of their annewari, the inspection of *tagai* works and detection of illegal occupation of land ;

(2) preparation of agricultural and other statistical returns, viz., crop statistics, cattle census, and water supply ;

(3) supervision of the village officers in the preparation and maintenance of the record of rights, the mutation register and the tenancy register ;

(4) examination of land revenue receipts and supervision of the revenue collection ; and

(5) such other miscellaneous work as the Mamlatdar may from time to time entrust them with, e.g.. enquiry into an alleged encroachment.

Patel

The Patel (*Village Headman*) :—The Patel is the principal official in a village. The duties of the patel fall under the following heads : (i) revenue ; (ii) quasi-magisterial ; and (iii) administrative. His revenue duties are :—

(1) in conjunction with the *talati* (or village accountant) to collect the revenue due to Government from the *rayats* ;

(2) to detect encroachments on Government land and protect trees and other property of Government ;

(3) to execute the orders received from the taluka office in connection with recovery of revenue and other matters ;

(4) to get the *talati* to maintain properly the record of rights and village accounts and to get him to submit the periodical returns punctually ; and

(5) to render assistance to high officials visiting the village for inspection work and other purposes.

There are quasi-magisterial functions appertaining to the police patel. In a majority of villages the same person is both the police and the revenue patel. The police patel is responsible for the writing up of the birth and death register and for the

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care of unclaimed property found in the village. Several duties have been imposed on the police *patel* by the Bombay Village Police Act (VIII of 1867). The village police is under his charge, and he has authority to require all village servants to aid him in performing the duties entrusted to him. He has to dispose of the village establishment so as to afford the utmost possible security against robbery, breach of the peace and acts injurious to the public and to the village community. It is the police patel's duty to furnish the taluka magistrate with any returns or information called for and keep him constantly informed as to the state of crime and the health and general condition of the community in his village. He has to afford police officers every assistance in his power when called upon by them for assistance. Further, he has to obey and execute all orders and warrants issued to him by an executive magistrate or a police officer ; collect and communicate to the district police intelligence affecting the public peace ; prevent within the limits of his village the commission of offences and public nuisances ; and detect and bring offenders therein to justice. If a crime is committed within the limits of the village and the perpetrator of the crime escapes or is not known, he has to forward immediate information to the police officer in charge of the police station within the limits of which his village is situated, and himself proceed to investigate the matter and obtain all procurable evidence and forward it to the police officer. If any unnatural or sudden death occurs, or any corpse is found, the police patel is bound to assemble an inquest, to be composed of two or more intelligent persons belonging to the village or neighbourhood. The report of the inquest has then to be forwarded by him to the police officer. He has also to apprehend any person in the village whom he has reason to believe has committed any serious offence and send him, together with all articles to be useful in evidence, to the police officer.

As regards the patel's administrative duties, he is expected to look to the sanitation and public health of the village. He must also report promptly the outbreak of any epidemic disease to the taluka office. He is expected to render every assistance to travellers, provided payment is duly tendered.

Talati

The Talati (village accountant) :—The office of the village accountant *i.e.* talati is held by stipendiary *talatis* who are selected for the posts. He is given the charge of a village or villages according to the work of land revenue collection and other facts. This charge is known as *saza*.

His main duties are : (1) to maintain the village accounts relating to demand, collection and arrears of land revenue, etc., the record of rights and all other village forms prescribed by Government ; (2) to inspect crops and boundary marks and prepare agricultural statistics and (3) to help the patel in the collection of land revenue, write the combined day and receipt

books and other accounts and do other clerical work, including that of the police patel when the latter is illiterate.

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Village servants

Village servants :—In addition to the village officers mentioned above, there are some hereditary village servants. They are of two kinds, (i) those useful to Government and (ii) those useful to the community.

The village servants useful to Government are termed as inferior village servants and their posts are stipendiary in this district and they are remunerated either in land or in cash or in both.

The Service Inam lands assigned for the remuneration of these village servants remain in their possession till they serve Government and are promptly resumed on their ceasing to render the services. The Service Inam lands are governed under the Resumption Rules of 1908.

With the speedy progress of civilisation, the importance of the inams for the services useful to the community , has now decreased and therefore, the services stipulated thereunder were not considered necessary in these days. Government have, therefore, after consideration abolished the inam under this class under the Bombay Services Inams useful to the Community (Gujarat and Konkan) Resumption Rules, 1954 which came into force with effect from December 1954.

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Local Self Government in the District is conducted by various statutory bodies enjoying local autonomy in different degrees. The progress of these institutions has gone on in three spheres. First, in regard to their constitution, from fully or partly nominated bodies they have now come entirely elective Secondly, their franchise, which had gone on widening had, with the enactment of the Bombay Local Authorities Adult Franchise and Removal of Reservation of Seats Act (XVII of 1950) reached the widest limit possible, viz., universal adult franchies. Every person who—

(*a*) is a citizen of India,

(*b*) has attained the age of 21 years, and

(*c*) has the requisite residence, business premises or taxation qualification

is now entitled to be enrolled as a voter. Prior to 1950, reservation of seats had been provided in municipalities and in the

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District Local Board for women, Mohammadans, Christains, Anglo-Indians, Harijans and Backward Tribes, and in village Panchayats for women, Mohammadans, and Harijans and Backward Tribes. Before 1947, Mohammadans were also provided separate electorates in local bodies and municipalities. The enactment mentioned above abolished the reservation of seats for Mohammadans, Christians and Anglo-Indians but continued it for ten years from the commencement of the Constitution of India (i. e. till 26th January 1960) for women, the Scheduled Castes and the Scheduled Tribes, which castes and tribes more or less represent Harijans and Backward Tribes. Thirdly, wider and wider powers have been gradually conferred on local bodies for the administration of the areas under their charge.

Another recent reform is connected with the controlling authority over institutions of local self Government.

Before the enactment of the Bombay Commissioners (Abolition of Office) Act (XXVIII of 1950) the Commissioners of Divisions used to exercise this control, but since its enactment, by notification in the Local Self Government and Public Health Department No. 6548/33, dated the 15th August, 1950, issued under section 3 of the Act, Government appointed Directors of Local Authorities to exercise such functions as the Commissioner of Divisions used to exercise under the following acts :—

(1) The Bombay Village Sanitation Act (I of 1889).

(2) The Bombay District Vaccination Act (1 of 1892).

(3) The Bombay District Municipal Act (III of 1901).

(4) The Bombay Town Planning Act (1 of 1915).

(5) The Bombay Local Boards Act (VI of 1923).

(6) The Bombay Municipal Boroughs Act (XVIII of 1925).

(7) The Bombay Local Fund Audit Act (XXV of 1930).

(8) The Bombay Village Panchayats Act (VI of 1933).

The Director of Local Authorities, Northern Division, had jurisdiction over the Surat district. Now Commissioner, Baroda Division has jurisdication over Surat district.

Municipalities

The Municipalities :—The total area in the district under the administration of municipalities in 1951 was nearly 16.17 sq. miles with a population of 3,533,20.

Next in rank to a municipal corporation are municipal boroughs governed by the Bombay Municipal Boroughs Act (XVII of 1925). Surat and Navsari municipalities in the district are Borough municipalities.

The other municipalities in the district are all governed by the Bombay District Municipal Act (III of 1901). The following are the municipalities in the district working under this Act :— Rander, Vyara, Billimora, Gandavi, Bulsar, Dharampur. Under this Act, the State Government has power to declare by Notification any local area to be "municipal district" and also to alter the limits of any existing municipal district. In every municipal district a municipality has to be constituted, consisting of elected councillors, the Commissioner having power to nominate councillors to represent consituencies which fail to elect the full number alloted to them. The State Government has power to prescribe the number and the extent of the wards to be constituted in each municipal district and the number of councillors to be elected by each ward. Till 26th Januray 1960, it can also reserve seats for the representation of women, the scheduled castes and the scheduled tribes. The term of office of a municipality is four years, but it can be extended to an aggregate of five years by an order of the Commissioner. Under the Act, every municipality has to be presided over by a president selected from among the councillors and either appointed by Government or elected by the municilality if the State Government so directs. A Vice-President is elected by the councillors from among themselves, but in the case of a municipality whose president is appointed by Government the result of the election of Vice president is subject to the approval of Government. At present all municipalities in the Surat district are allowed to elect their presidents.

The administration of a municipal district vests in the municipality. The head of the municipality is the President, whose duty is to :—

(*a*) preside at meetings of the municipality ;

(*b*) watch over the financial and executive administration and to perform such other executive functions as may be performed by the municipality ;

(*c*) exercise supervision and control over the acts and proceedings of all officers and servants of the municipality.

There is provision of the compulsory constitution of a managing committee in the case of all municilaplities and of a pilgrim committee in the case of those municipalities which have been specially notified by the State Government. Option is also left to municipalities to appoint other executive or consultative committees. In the Surat district, no municipality has pilgrim committee.

The Act divides municipal functions into obligatory and optional. The former include all matters essential to the health, safety, convenience and well-being of the population,

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while the latter are matters which, though they are legitimate objects of local expenditure, are not considered absolutely essential. The following are among the obligatory duties laid on all municipalities :—

(*a*) lighting public streets, places and buildings ;

(*b*) watering public streets and places ;

(*c*) cleansing public streets, places and sewers ; removing nexious vegetation ; and abating all public nuisances ;

(*d*) extinguishing fires, and protecting life and property when fires occur ;

(*e*) regulating or abating offensive or dangerous trades or practices ;

(*f*) removing obstructions and projections in public streets or places ;

(*g*) securing or removing dangerous buildings or places, and reclaiming unhealthy localities ;

(*h*) acquiring and maintaining, changing and regulating places for the disposal of the dead ;

(*i*) constructing, altering and maintaining puolic streets, culverts, municipal boundary marks, markets, slaughter-houses, latrines, privis, urinals, drains, severs, drainage works, sewerage works, baths, washing places, drinking fountains, tanks, wells, dems and the like ;

(*j*) obtaining a supply or an additional supply of water, proper and sufficient for preventing danger to the health of the inhabitants from the insufficiency or unwholesomeness of the existing supply when such supply or addtional supply can be obtained at a reasonable cost ;

(*k*) registering births and deaths ;

(*l*) public vaccination ;

(*m*) establishing and maintaining hospitals and dispensaries and providing medical relief ;

(*n*) establishing and maintaining primary schools ;

(*o*) disposing of night soil and rubbish and, if so required by the State Government preparing compost manure from such night soil and rubbish ;

(*p*) constructing and maintaining residential quarters for the conservancy staff of the municipality ;

(*q*) providing special medical aid and accommodation for the sick in times of dangerous diseases ; and taking such measures as may be required to prevent the outbreak of the disease or to supress it and prevent its recurrence ;

(*r*) giving relief and establishing and maintaining relief works in time of femine or scarcity to or for destitute persons ; and

(*s*) paying for the maintenance and treatment of lunatics and lepers and persons affected by rabies, in case they are lidigent and have been resident in the municipality for one year.

Municipalities may, at their discretion, provide out of their funds for the following among others :—

(*a*) laying out new public streets ;

(*b*) constructing, establishing or maintaining public parks, gardens, libraries, museums, lunatic asylums, halls, offices, dharamshalas, rest houses, homes for the disabled and destitute persons and other public buildings ;

(*c*) furthering educational objects ;

(*d*) securing or assisting to secure suitable places for the carrying on of offensive trades ;

(*e*) establishing and maintaining a farm or factory for the disposal of sewage ;

(*f*) the construction, purchase, organisation, maintenance, extension and arrangement of mechanically propelled transport facilities for the conveyance of the public ;

(*g*) promoting the well being of municipal employees and their dependants ;

(*h*) providing accommodation for municipal employees and their dependants ;

(*i*) construction of sanitary dwellings for the poorer classes ; and

(*j*) any measure likely to promote the public safety, health, convenience or education.

Municipal taxation may embrace the following items :—

(*i*) a rate on buildings and lands ;

(*ii*) a tax on all or any vehicles, boats, or animals used for riding, draught or burden ;

(*iii*) a toll on vehicles (other than motor vehicles or trailers) and animals used as aforesaid ;

(*iv*) an octroi on animals and goods ;

(*v*) a tax on dogs ;

(*vi*) a special santitary cess upon private latrine, premises or compounds cleaned by municipal agency ;

(*vii*) a general sanitary cess for the construction and maintenance of public latrines, and for the removal and disposal of refuses ;

(*viii*) a general water rate or a special water rate, or both ;

(*ix*) a lighting tax ;

(*x*) a tax on pilgrims ; and

(*xi*) any other tax which the State legislature has power to impose.

Instead of (*i*), (*vii*), (*viii*) and (*ix*), a consolidated tax assessed as a rate on buildings or lands may be imposed.

The rules regulating the levy of taxes have to be sanctioned by the Commissioner who has been given powers to subject the levy to such modifications not involving an increase of the amount to be imposed or to such conditions as to application of a part of whole of the proceed of the tax to any purpose. If any tax is imposed on pilgrims resorting periodically to a shrine within the limits of the municipal district, the Commissioner may require the municipality to assign and pay to the District Local Board such portion of the tax as he deems fit, and when a portion is so assigned an obligation is laid on the board to expend it on works conducive to the health, convenience and safety of the pilgrims.

The State Government may raise objections to the levy of any particular tax which appears to it to be unfair in its incidence or obnoxious to the interest of the general public and suspend the levy of it until such time as the objections are removed. The State Government may require a municipality to impose taxes when it appears to it that the balance of the municipal fund is insufficient for meeting any cost incurred by any person acting under the directions of the Collector or of the Commissioner for the execution of any work or the performance of any duties which the municipality is under an obligation to execute or perform but which it was failed to execute or perform.

Many of these taxes are levied by the municipalities but the rates at which they are levied do not enable them to meet all their expenditure. Their incomes have to be supplemented by numerous grants made by Government, both recurring and non-recurring. For instance, grants are made by Government to municipalities towards maintenance of municipal dispensaries and hospitals, water supply and drainage schemes, expenditure on epidemics, payment of dearness allowance to staff, etc. These grants add substantially to the municipal income.

Since the passing of the Bombay Primary Education Act (LXI of 1947), control of primary education has virtually been transferred from smaller municipalities and the District Local Board to the Surat District School Board; and the financial liabilities of smaller municipalities have been limited. The Primary Education Act divides municipalities into two categories, viz., (1) those authorized to control all approved schools within their areas, and (2) those not so authorized. All smaller municipalities, being non-authorized, have to pay over the District School Board only 5 per cent, of the ratable value of the properties in their areas as a contribution towards the expenses on education.

Control over the municipalities is exercised by the Collector, the Commissioner and the State Government. The Collector has powers of entry and inspection in regard to any immovable property occupied by a municipality or any work in progress under it. He may also call for extracts from the proceedings of a municipality or for any books or documents in its possession or under its control. He may also require a municipality to take into its consideration any objection he has to any of its acts or information which he is able to furnish necessitating any action on its part. These powers are delegated by the Collector to the Assistant or Deputy Collectors in charge of prants.

The Commissioner has powers to order a municipality to suspend or prohibit, pending the orders of the State Government, the execution of any of its order or resolution, if, in his opinion, it is likely to cause injury or annoyance to the public or to lead to a breach of the peace or is unlawful. In cases of emergency, the Commissioner may provide for the execution of any works or the doing of any act which a municipality is empowered to execute or do and the immediate execution or doing of which is necessary for the health or safety of the public and may direct that the expenses shall be forthwith paid by the municipality.

Subject to appeal to the State Government, the Commissioner is also empowered to require a municipality to reduce the number of persons employed by it and also the remuneration assigned to any member of the staff. On the recommendation of a municipality he can remove any councillor guilty of misconduct in the discharge of his duties.

When satisfied that a municipality has made a default in performing any statutory duty imposed on it the State Government may direct the Commissioner to fix a period for the performance of that duty, and if that duty is not performed within the period stipulated, the Commissioner may appoint some person to perform it and direct that the expenses shall be forthwith paid by the municipality. If the State Government is of the view that any municipality

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is not competent to perform or persistently makes default in the performance of its duties or exceeds or abuses its powers, it may either dissolve the municipality or supersede it for a specific period. The president or vice president of a municipality or municipal borough may be removed by the State Government for misconduct or for neglect or incapacity in regard to the erformance of his duties.

The audit of all Local Fund Accounts is provided for by the Bombay Local Fund Audit Act (XXV of 1930). The Commissioner on receipt of the report of the Examiner of Local Funds, may disallow any item of expenditure which appears to him to be contrary to law and surcharge the same on the person making or authorising the making of the illegal payment.

District Local Board.

The District Local Board.—The local self-government of the Surat district, excluding its municipal areas, is entrusted to the Surat District Local Board, which is constituted under the Bombay Local Boards Act (VI of 1923). The area administered by the Board is nearly 4045 square miles, and, according to the census of 1951, it contained a population of 14,78,879. The board is wholly elected and is composed of 60 members, thirty two of whom occupy seats reserved for women, scheduled castes and scheduled tribes. Its terms of office is four years, exten- sible by order of the Commissioner to a term not exceding five years in the aggregate. If an election does not result in the return of the required number of qualified person willing to take Office, the Commissioner has to appoint the necessary number.

The president of the board is elected by the board from among its own members. His term of office is co-extensive with the life of the board. His chief functions are (a) to preside at meeting of the board; (b) to watch over the financial and executive administration of the Board; (c) to exercise supervision and control over the acts and proceedings of all officers and servants of the board in matters of executive administration, and in matters concerning the accounts and records of the board, and (d) subject to certain limitations prescribed by Rules framed under the Act, to dispose of all questions relating to the service of the officers, and servants, and their pay, privileges and allowances. Without contravening any order of the board, he may, in cases of emergency, direct the execution or stoppage of any work or the doing of any act which requires the sanction of the Board.

There is also a vice-president of the board who is elected like the president. He presides at meetings of the board in the absence of the president, and exercises such of the powers and performs such of the duties of the president as the president may delegate to him. Pending the election of president, or during

the absence of the President on leave, he exercises the powers and performs the duties of the President.

Under the Act it is compulsory on the board to appoint a Stading Committee. The appointment of other committees is optional, but the board has been appointing the taluka and dispensary committees. The standing committee is to consist of not more than nine members, and not less than five members, as the board may determine. The President of the Board is the ex-officio chairman of the committee. Reappropriation and tenders of works consisting not more than Rs. 5,000 are sanctioned by it. It also considers subjects that generally do not come within the perview of other committees. The other committees advise the board on subjects coming within their perview.

The obligatory and optional functions of the board are se out in section 50 of the Bombay Local Boards Act. The Chie obligatory duties are:—

1. The construction of roads and other means of communication and the maintenance and repair of all roads and other means of communication vested in it;

2. the construction and repair of hospitals. dispensaries, markets, dharamshalas, and other public buildings and the visiting, management and maintenance of these institutions;
3. the construction and repair of public tanks, wells and water-works; the supply of water from them and from other sources; and the construction and maintenance of works for the preservation of water for drinking and cooking purposes from pollution;
4. public vaccination and sanitary works and measures necessary for the public health;
5. the planting and preservation of trees by the side or in the vicinity of roads vesting in the board; and
6. numbering of premises and maintenance of property vesting in the Board.

Under the Bombay Primary Education Act (LXI of 1947) and the rules framed under it, which came into force from 1st April, 1949, the District Local Board, Surat has no longer any administrative or financial control over primary education. The only duty of the board is to hold an election of the members of the District School Board as prescirbed in the Act, and to assign the School Board a revenue equal to 15 pies out of the income from the cesses on land revenue and water-rate.

The main financial resources of the Board, as set out in section 75 of the Bombay Local Boards Act, are :—

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1. a cess on land revenue upto a maximum of three annas in the rupee.
2. a cess on water-rate upto a maximum of three annas in the rupee;
3. all rents and profits accrinug from property (including ferries) vested in the board;
4. a tax professions, trades, calling and employment; and
5. grants from Government.

Under section 79 of the Act, the board has to assign to every municipality two-thirds of the cesses on land revenue levied from lands within that municipality. The Board now levies the cess on land revenue at the maximum of three annas in the rupee.

Under section 118—A of the Act the State Government has to make every year a grant to evry district local board equivalent in amount to 15 percent of the land revenue, including non-agricultural assessment, realised during the previous year from lands within the limits of the board, excluding lands within minicipal boroughs, municipal districts or village panchayats.

The controlling authorities in relation to the District Local Board are the Collector, the Commissioner, Baroda Division; and State Government. They exercise, in the case of the District Local Board, more or less the same powers that they have in the case of municipalities.

The following were the receipts and expenditure of the Surat District Local Board under the various heads in 1956-57 excluding Primary Education (which is now looked after entirely by the District School Board), and Deposits, Advances, Investments and Provident Pension Funds:—

Receipts

	Rs.
Land Revenue	2,18,128.
Local Rates	3,54,102.
Interest	30,672.
Police	130.
Medical	66,258.
Scientific and other minor departments ...	—
Miscellaneous and grants including general and dearness grants	1,54,397.
Civil Works	13,30,679.
Total ...	21,54,366.

Expenditure

	Rs.
Refund and Drawback	416.
General Administration	1,04,907.
Medical	2,95,541.
Scientific and other minor departments ...	—
Miscellaneous	53,658.
Civil Works	24,01,075.
Total...	28,55,597.

Under deposits, advances, investments and provident and pension funds the receipts were Rs. 11,47,976 and expenditure Rs. 12,37,626.

The board has unrestricted powers of appointment of the officers and of payment to them but where it appoints a Chief Officers or an Engineer and such appointment is approved by Government, Government has to pay to the board two-thirds of the salary of such Chief Officer and an Engineer. Their scale of pay is Rs. 250-20-450-25-500 and Rs. 350-25-500-30-800 respectively.

Roads.—In 1956-57, the board had a total road mileage of 1092. The maintenance of these roads is a responsibility of the Board. Of these, 84 miles are metalled, 513 miles unmetalled and 495 miles cart tracks. The board is required to frame a programme of road improvements and to submit it to the Commissioner, Baroda Division, for sanction. Out of the amount required for this programme, ususlly 60 per- cent is paid by Government as grant-in-aid. Current repair works are generally provided from the local fund.

Village Water Supply.— The water supply in the villages of the district is generally satisfactory. Despite this there is some difficulty regarding potable water in the costal areas of Olpad, Chorasi, Navsari and Bulsar talukas. Wells are provided by the board to almost all the villages but some of them in the hilly areas go dry in summer and at times when the water supply is not sufficient the board tries to repair these wells and keep them in order with the help of boring machines at its disposal.

Government now provides wells to those villages, which require them on account of increased population or of shifting of village sites and carry out their projects mostly through the board. The board also undertakes construction of wells sanctioned under the village water supply scheme. Under this scheme three-fourths of the expenditure is borne by Government and one-fourth by the village people and or the board.

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The wells so constructed are to be maintained by the board or the village panchayats concerned out of their funds as properties vesting in them.

Health and Sanitation.—The board has not yet appointed a Health Officer of its own. Its obligation in connection with the maintenance of public health is discharged by the board with the help of the Assistant Director of Public Health to whom it provides the staff and funds required for fighting epidemics such as small-pox and for the maintenance of public health. Anti-plague and cholera vaccines and other necessary medicine, contingencies and appliances are supplied by the board from its funds. There are 12 permanent vaccinator who are under the Assistant Director of Public Health, but the cost on their account is borne by the board. The board treats all public and private wells and other sources of water supply with potassium permanganate when epidemics are prevailing or are likely to prevail. To check the growth of guines worm step wells are converted by the board into draw wells.

All sanitary arrangement in connection with fairs in the district are made by the Health Department of Government. The board, however, looks to the provision of pure drinking water during fairs and on routes leading to pilgrim centres and assists the Health Department in other ways. The roads leading to the pilgrim centres are maintained by the board.

The Board maintains 34 allopathic dispensaries and there are 41 subsidized medical practitioners, of whom 23 are under the Rural Medical Aid Scheme of Government. Four-fifths of the expenditure on the Government scheme is borne by Government and one-fifth by the Board.

Besides five nurse-midwives attached to the dispensaries under the Rural Medical Relief scheme of Government, seven nurse-midwives are appointed by the board. A maternity ward is also attached to the Bardoli dispensary.

Other amenities:—The board has 25 dharamshalas and one travellors bungalow under its control in the district. The dharamshala, in the village panchayat areas have been generally transferred to the panchayats. Owing to improvement in means of communication and quick transport, travellers do not halt in dharamshalas and practically the purpose for which they were built in the past no longer survives. They are now used for housing schools and panchayat offices when required.

Village Panchayats

The Village Panchayats :—Village Panchayats form local units of administration for villages. Under the Bombay Village Panchayats Act (VI of 1933), as amended up to 1st July, 1949, in every local area which has a population of not less than 2,000 a panchayat has to be established. It is also permissible fo tha State Government to direct the establishment of a panchayat

in a local area having a population of less than 2,000. In accordance with this provision, Government has decided that a panchayat should be established in a village with a population of 1,000 and over if there is a spontaneous demand for it from the villagers. In revenue villages with a population of less than 1,000, fifty residents of the village have to apply for the establishment of a panchayat before the setting up of one is considered by Government. There were 758 village panchayats in the Surat district on 31st March, 1958.

The maximum number of members for a panchayat is fifteen and the minimum number seven. The members are to be elected on adult franchise. Till 26th January 1960 (i. e. till the expiration of ten years from the commencement of the Constitution of India), the State Government have been given power to reserve seats (in joint electorates) for the representation of women, scheduled castes and scheduled tribes. However, no seats may be reserved for the scheduled castes and scheduled tribes unless Government is of opinion that the reservation is necessary having regard to the population in the village of such castes and tribes. The term of office of panchayats is three years, which may be extended up to five years by the Collector when occasion demends. Every panchayat has to elect a sarpanch and a deputy sarpanch from among its members. The sarpanch presides over the panchayat and the executive power for the purpose of carrying out the provisions of the Panchayats Act and the resolutions passed by the panchayats vests in the sarpanch.

Every panchayat has also to appoint a secretary, whose qualifications, powers duties, remuneration and conditions of service (including disciplinary matters) are prescribed by Government. Government pays three-fourth of the salary and allowances of the secretary.

Section 26 of the Village Panchayats Act lays down that so far as the village funds at its disposal allow and subject to the general control of the District Local Board, it shall be the duty of a panchayat to make resonable provision within the village in regard to the following matters :—

(*a*) supply of water for domestic use ;

(*b*) cleansing of the public roads, drains, bunds, tanks and wells, etc ;

(*c*) removing of obstructions and projections in public streets or places ;

(*d*) construction, maintenance and repair of public roads drains, bunds and bridges ;

(*e*) sanitation, conservancy and prevention and abatement of nuisances ;

(*f*) preservation and improvement of public health ;

(*g*) maintenance and regulation of the use of public buildings, grazing lands, forest lands, tanks and wells, vesting in or under the control of the panchayat ;

(*h*) lighting of the village ;

(*i*) control of fairs, bazars, slaughter-houses and cart stands ;

(*j*) provision, maintenance and regulation of burring and burial grounds.

Most of the village panchayats have carried out efficiently their duties as prescribed under the Village Panchayats Act. The village panchayats in the National Extension Service Block and the Community Project areas have been showing keen interest in the work of development and uplift of the villages.

Some of the outstanding activities are given below :—

The dispensary with maternity home was started by the Village Panchayat of Baudhan with the aid of public donation. The Village Panchayat of Kadod has also started a dispensary. The Variav village panchayat also proposes to run a maternity home for which a building is constructed.

Facilities for water-supply through water works have been provided by the Village Panchayats of Bamni, Kamalchhod, Tadkeshwar, Songadh, Kathor, Kholwad, Haripura, Umrakh and Palso.

The following village panchayats have also supplied electric street lighting services :—

1. Bardoli, 2. Katargam, 3. Fulpada, 4. Athwa, 5. Navagam, 6. Mograwadi, 7. Bhagda-vada, 8. Bhagda-Khurd, 9. Kholwas 10. Kathor, 11. Udvada, 12. Vapi, 13. Pardi 14. Jalalpore station Area, 15. Jalalpore village, 16. Mota Varchha, 17. Unai, 18. Bansda, 19. Abrama, 20, Dungri, 21. Parnera, 22. Chikhali.

Under section 26A of the Act, it is competent to a panchayat to make provision within the village in regard to the following among other matters :—

(*a*) crop experiments;

(*b*) construction andmaintenance of slaughter-houses ;

(*c*) relief of the destitute and the sick ;

(*d*) improvement of agriculture ;

(*e*) co-operative farming ;

(*f*) improvement of cattle and their breeding and general care of the livestock ;

(*g*) establishemnt of granaries ;

(*h*) village libraries and reading rooms ;

(*i*) promotion, improvement and encouragement of cottage industries ;

(*j*) construction and maintance of public latrines ;

(*k*) establishment and maintenance of markets ;

(*l*) watch and ward of the village and the crops therein.

Under section 28 of the Act, when sufficient funds for the purpose are placed at the disposal of the panchayat by the District Local Board, the panchayat is under an obligation to :—

(a) supervise the labour employed by the Board on works within the village ;

(b) supervise repairs to *dharamshalas* ;

(c) manage and maintain cattle pounds ; and

(d) execute such works as are entrusted to it by the Board.

Subject to such conditions as the State Government may impose, it is also competent to a panchayat to perform other administrative duties including the distribution of irrigation water that may be assigned to it by the State Government after consultation with the District Local Board.

Under section 89 of the Act, every panchayat is under an obligation to levy a house tax and a tax on lands not subject to payment of agricultural assessment at rates prescribed by Government and it is competent to a panchayat to levy all or any of the following taxtions as may be prescribed by Government, namely :-

(i) a pilgrim tax ;

(ii) a tax on fairs, festivals and entertainment ;

(iii) a tax on sales of goods ;

(iv) octroi ;

(v) a tax on marriages, adoptions and feasts ;

(vi) a tax on shops and hotels ;

(vii) a tax on premises where machinery is run by steam, oil, electric power, or manual labour for any trade or business and not for a domestic or agricultural purpose ;

(viii) a fee on markets and weekly bazars ;

(ix) a fee on cart stands ;

(x) a fee for supply of water from wells and tanks vesting in it for purposes other than domestic use.

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It is also laid down that every panchayat shall levy any one of the above taxes as may be prescribed by Government in regard to the panchayat.

It is also competent to a panchayat to levy any other State tax which has been approved by the District Local Board and sanctioned by Government.

Section 90 of the Act gives the District Local Board power to compel a panchayat to levy or increase any of the taxes or fees specified if it appears to the board that the regular income of the panchayat falls below what is necessary for the proper discharge of the obligatory duties of the panchayat.

The State Government makes every year a grant to every panchayat equivalent in amount to 15 per cent. of the ordinary land revenue or 25 per cent of the local fund cess whichever is greater.

Nyaya Panchayats.

Unlike other local self-governing units, every village panchayat is empowered to constitute a body called "*nyaya panchayat*" to try petty civil suits and criminal cases. The *nyaya panchayat* is composed of five members elected by the Panchayat at its first meeting out of its members. The *nyaya panchayat* elects its chairman from amongst its members and its term of office is co-extensive with that of the panchayat. The State Government has power to remove any member of the *nyaya panchayat* for reasons of misconduct in the discharge of his duties, or of any disgraceful conduct, or for neglect, refusal or incapacity in regard to the performance of his duties as a member of the *nyaya panchayat*.

The Secretary of the village panchayat acts as the judicial clerk of the nyaya panchayat. Conviction by a *nyaya panchoyat* is not deemed to be previous conviction for the purpose of the Indian Penal Code.

Most of the panchayats have established *nyaya panchayats* while only 174 of them have been invested with some judicial powers. There is a persistant demand from others for investing them with similar powers.

The following statement shows the work turned out by the *nyaya panchayats* invested with powers during the year 1957-58 :-

No. of Nyaya Panchayats invested with powers.	No. of cases received.	No. of cases disposed off.	No. of cases which remained pending.
174	199	170	29

Pleaders, vakils, etc., are not permitted to appear on behalf of any party to any suit or case.

Appeals are allowed to the District Court in civil suits and to the Sessions Court in criminal cases.

Powers of control over panchayats are given to the Collector and District Local Board. Both of them have concurrent powers to call for information and to compel the panchayat to take into consideration any objection they have to any acts of the panchayat either of commission or of ommission, or any information which necessitates the commission of any act by the panchayat. They can also compel the panchayat to reduce the number of the staff maintained by it or the remuneration paid to them. In addition the Collector has powers of suspension and prohibition in respect of the execution of any order or resolution of a panchayat which, in his opinion, is likely to cause injury or annoyance to the public or to lead to a breach of the peace. In cases of emergency, the Collector may also provide for the execution of any work or the doing of any act which a panchayat is empowered to execute or do, and the immediate execution or doing of which is, in his opinion, necessary for the health or safety of the public, and may direct that the expenses shall be forthwith paid by the panchayat.

The District Local Board is authorised to carry out each year the audit of the accounts of a panchayat and to forward a copy of the audit note to the Collector. If it appears to the Board that a panchayat has made default in the performance of its obligatory duties, it may order the duty to be performed within a specified period, and if the duty is not performed within that period, the Board can appoint some person to perform it and direct that the expense be paid by the defaulting panchayat.

The State Government also is given power to carry out at the cost of the panchayat any of the panchayat's obligatory duties when it appears to it that the District Local Board has neglected to take action. The State Government has also powers, after consultation with the District Local Board, to dissolve or supersede a panchayat if,in its opinion the panchayat had exceeded or abused its powers or made persistent default in the performance of its obligatory duties, or persistently disobeyed any of the orders of the Collector. If a panchayat is superceded, all the powers and duties of the panchayat will be exercised and performed by a person or persons appointed by the State Governemt.

In pursuance of a resolution dated the 13th September, 1950 Government has appointed in the Surat district a special officer in the grade of Mamlatdar for the development of village panchayats on sound and proper lines. This officer is authorised, under section 95 (3) of the village Panchayats Act, to exercise

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the powers of a Collector and of a District Local Board under section 94 (1) of the Act. Several duties have also been placed on this officer, and he is expected to do every thing that is possible to popularize village local self-government and to make the working of village panchayats really effective. He has to exercise supervision over the affairs of panchayats already established in the District, recommended to the Collector the establishment of new panchayats, tour round and explain the panchayats the system of panchayat administration, watch the actual working of the panchayats and give them guidance if their working is not proper, and persuade women to take active interest in the affairs of panchayats. He is directed to hold annual gatherings of members of panchayats so that panchayats may become aware of the activities of panchayats of one another. An annual report on the activities of panchayats has to be prepared by him and submitted to the Collector before the 15th May and within a fortnight thereafter, the Collector has to forward that report to the Government with his own remarks.

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JUDICIAL.

District Judge

The Judicial Departments

The District Judge*, Surat, is the highest judicial authority in the district and presides over the district. The District Judge, Surat, is also, the District Judge of Dangs district. Under articles 233 of the constitution of India, appointments, postings and promotions of District Judges are+ to be made by the Governor in consultation with the High Court, and under articles 234, appointment of persons other than District Judges to the Judicial service+ is made by the Governor in accordance with rules made by him after consultation with the State Public Service Commission and with the High Court. Under articles 235, the control over the District Court and the Courts subordinate to it, including the posting and promotions and the grant of leave to, persons belonging to the Judicial service and holding any post inferior to the post of District Judge, is vested in the High Court.

Civil Courts

The District Court is the principal court of original Jurisdiction in the District and it is also a court of appeal from all decrees and orders upto the value of Rs. 10,000 passed by the subordinate courts from which an appeal can be preferred The District Judge exercises general control over the all Civil Courts and their establishment and inspects the proceedings of these Courts.

In addition to the District Court there is located in Surat one Court which is presided over by an Assistant Judge. But this is, however, a temporary Court which is continuously functioning since December 1955, exercising both original and appellate jurisdiction. He exercises jurisdiction over original cases, the value of which does not exceed Rs. 15,000.

There is no small causes court at Surat. The small cause jurisdiction, is, therefore, vested in Civil Judges, Senior Division and Junior Division, who are empowered to try civil suits whose value does not exceed Rs. 1,500. The Civil Judge, Junior Division, are empowered to try small cause cases up to the value of Rs. 500. The powers are vested according to the length of service of each Civil Judge in both the cadres. The Civil Judges, Junior Division, are also exercising powers under the Bombay Rents, Hotel and Lodging House Rates Control Act, 1947 (Act XLVII of 1947).

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*Under Article 236 of the Constitution of India, the term "District Judge" includes Additional district judge, Assistant district judge, Chief judge of a small cause court, Sessions judge, Additional sessions judge and Assistant sessions judge.

+In Article 236 of the Constitution of India, "judicial service" is described as a service consisting exclusively of persons intended to fill the post of district judge and other civil judicial posts inferior to the post of district judge.

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Subordinate to the District Judge, there are two cadres of Civil Judges Senior Division and Junior Division. The jurisdiction of a Civil Judge, Junior Division, extends to all original suits and proceedings of a civil nature wherein the subject matter does not exceed Rs. 10,000, in value, while that of a Civil Judge, Senior Division, extends to all original suits and proceedings of a civil nature irrespective of the value of the subject matter, arising in the whole District of Surat and Dangs, Appeals in suits or proceedings wherein the subject matter does not exceed Rs. 10,000 in value are taken to the District Court, while in those wherein the subject matter exceeds in value Rs. 10,000 are taken direct to the High Court.

These are three permanent courts of Civil Judges at Surat, viz., two of Civil Judges, Senior Division, and one of Civil Judge, Junior Division. There are also three temporary courts of Civil Judges, one of Civil Judge, Senior Division and two of Civil Judges, Junior Division, at Surat at present. Outside Surat, there are, in all nine Civil Judges (Junior Division) distributed as follows, viz., one each at Bulsar, Pardi, Vyara, Kathor, Bansda, Dharampur, Olpad and Bardoli, and two at Navsari. All the nine Civil Judges, Junior Division, stationed at the above places are also exercising powers of a first Class Magistrate.

Criminal Courts

The District Judge is also the Sessions Judge of the districts of Surat and Dangs. He is also the judge of the Parsi Matrimonial Court of the whole of Gujarat. The Sessions Judge tries criminal cases which are committed to his court by the Judical Magistrates after preliminary enquiry and hears appeals against and decisions of the subordinate Magistrates. The Sessions Judge is also appointed as Special Judge for the trial of case under the Criminal Law Amendment Act 1952 (XLVI of 1952).

In addition to the Sessions Judge, there is one Additional Sessions Judge. This post is held by the Assistant Judge on the civil side. The Sessions Judge and the Additional Sessions Judge can pass any sentence authorised by law, but any sentence of death passed by them is subject to confirmation by the High Court. The Assistant Sessions Judge can pass any sentence authorised by law except a sentence of death or imprisonment for life and imprisonment for a term exceedings seven years. The Court of Assistant Judge and Additional Sessions Judge at Surat is a temporary one.

The Bombay Separation of Judicial and Executive Functions Act (XXIII of 1951) has classified the Magistrates in the State of Bombay into two categories, viz. (1) Judicial Magistrate and (2) Executive Magistrates. All the Judicial Magistrates are sub-ordinate to the Sessions Judge and the Sessions Judge may, from time to time, make rules or give special orders as to the distribution of business amongst them in accordance with the powers vested in him under Criminal Procedure Code.

All the Executive Magistrates are subordinate to the District Magistrate of the district. Their powers and functions are detailed in the section dealing with Land Revenue and General Administration. Appeals from orders requiring security for keeping the peace or for good behaviour, however, life from Executive Magistrates to the Court of Sessions (Section 406 Criminal Procedure Code). The State Government has power by notification to direct that appeals from such orders made by a magistrate other than the District Magistrate shall lie to the District Magistrate and not to the Court of Sessions. Again under section 406A of the Code of Criminal Procedure any person aggrieved by an order refusing to accept or rejecting a surety under section 122 may appeal against such order, if made by a District Magistrate, to the Court of Sessions. Under section 435(4) the High Court is empowered to call for an examine the record of any proceeding under section 143 (prohibition of repetition of nuisance), 144 (temporary order in urgent cases of nuisance or apprehended danger), and 145 (procedure where disputes as to immoveable property are likely to cause breach of peace). even though such proceeding was before an Executive Magistrate.

The ordinary powers of the Magistrates of the Third, Second and First Class are detailed respectively in parts I, II, and III of the Criminal Procedure Code. They may be invested with additional powers by the state Government in consultation with the High Court, and these additional powers are detailed in Schedule IV of the Code. They are competant to pass the following sentences :—

(1) Magistrate of the First Class.	(1) Imprisonment for a term not exceeding 2 years, including such solitary—confinement as is authorised by law.
	(2) Fine not exceeding Rs. 1000.
(2) Magistrate of the Second Class.	(1) Imprisonment for a term not exceeding 6 months including such solitary-confinement as is authorised by law.
	(2) Fine not exceeding Rs. 200.
(3) Magistrate of the Third Class.	(1) Imprisonment for a term not exceeding one month.
	(2) Fine not exceeding Rs. 50.

After the effective application of the Bombay Separation of Judicial and Executive Functions Act, criminal justice is dispensed with by Judicial Magistrates or Civil Judges-*cum*-Judicial Magistrates. There are five Judicial Magistrates stationed at Surat, out of whom one is a Special

Judicial Magistrate First Class for Railways and one is a special Judicial Magistrate First Class for the Municipality. The Special Judicial Magistrate, First Class Railway, Surat, exercises jurisdiction over the railways passing through Surat, Broach and Dangs districts. There is one Judicial Magistrate, First Class, at Gandevi. The Civil Judges-*cum*-Judicial Magistrates are functioning at nine places in the district. They are at Bulsar, Navsari, Kathor, Vyara, Bansda-Dharampur, Olpad, Bardoli, Pardi. The Civil Judge-*cum*-Judicial Magistrate, Bansda, also exercises jurisdiction over Dangs district and he holds his court at Ahwa for a few days in a month for the disposal of civil and criminal work arising from that district.

One Juvenile Court is also established at Surat. The Judicial Magistrate First class, Surat, presides as Magistrate of that Court. Two more lady Honorary Magistrates also sit with him constituting a bench of Juvenile Court. This bench tries cases under the Bombay Children Act, 1948.

There are also 59 honorary magistrates in the district of whom 4 are ladies. They are all invested with powers of Second Class Magistrate. The powers of trying criminal cases were taken away from them in 1946, and they are now only authorised to do the work of attestation.

Other Law Officers.

The following are the law officers of Government functioning in the Surat district :—

(1) District Government Pleader and Public Prosecutor.

(2) Assistant Government Pleader and Assistant Public Prosecutor.

(3) Second Assistant Government Pleader and Second Assistant Public Prosecutor.

(4) Third Assistant Public Prosecutor.

(5) Honorary Assistant to the District Government Pleader.

One Sub-Government Pleader is also appointed at the following places, viz., Bulsar, Olpad, Kathor, Vyara, Navsari, Bardoli, and Bansda-Dharampur.

Number of Legal Practitioners.

There are at present 272 legal practitioners practising in Surat District, of whom 79 are Advocates of the High Court.

Nyaya Panchayats.

Under the Bombay Village Panchayat Act (VI of 1933) *nyaya panchayats* have been formed in a number of villages, and these institutions are empowered to try petty civil suits and criminal cases. These powers are detailed in the section relating

to Village Panchayats. Appeals from these courts are allowed to the District Court in civil suits and to the Sessions Court in criminal cases.

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Statistics of Civil Courts.

In the various courts of Surat district, at the beginning of the year 1956 there were 3,039 suits pending During the same year 4,899 suits were instituted and 87 suits were received or otherwise received and 4,783 were disposed of an the balance of suits pending at the close of the year was 3,242.

Of the 4,899 suits instituted, 2,913 were for money or moveable property, 1,375 were of value not exceeding Rs. 100. 2200 were of the value above Rs. 100 but not exceeding Rs. 1,000, 476 were of value above Rs. 1,000 but not exceeding Rs. 5,000 and 101 were of the value above Rs. 5,000. The total value of the suits instituted was Rs. 1,02,36,499-1-0. Of the 4,783 suits disposed of, 979 were disposed of without trial, 616 exparte, 76 on admission of claims, 2,237 by compromise, 554 after full trial, 38 on reference to arbitration, and 183 by transfer.

There were 266 appeals (including Miscellaneous appeals) pending at the beginning of the year 1956. During the year 1956, 145 appeals were instituted and 239 appeals were disposed of, and the balance pending at the end of the year was 172. Of the 239 appeals disposed of, 2 were dismissed for want of prosecution, 165 confirmed, 34 modified, 21 reversed, 17 remanded for retrial.

81 Land Acquisition References and 5 petitions under the Hindu Marriage Act were filed during the year 1956. The jurisdiction to try the cases is vested in the District Judge as well as, in the Civil Judge, Senior Division. Moreover, 4 suits under the Bombay Public Trusts Act and 1 suit under the Indian Divorce Act were also filed in the District Court, Surat, during the year 1956.

Statistics of Criminal Courts.

There were 77 offences reported to the Session Court, Surat, during the year 1956. The number of persons under trial was 151. The cases of 115 persons were disposed of during the year. Of these 115, 66 were acquitted or discharged and 47 were convicted. The cases of 2 persons were referred to the High Court. The sentences passed by the Court of Sessions were as follows, viz., 43 persons imprisonment and 13 persons fined. No one was awarded death sentence and sentence of whipping and no persons were asked to give security.

Revenue and Expenditure.

The following are the figures showing revenue and expenditure of the Judicial Department in the Surat District for the

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year 1956-57 :—

Revenue

		Rs.	As.	Ps.
1.	Sale proceeds of unclaimed and escheated property	6,085	4	9
2.	Fines by Civil and Sessions Courts ...	1,956,	0	0
3.	Magisterial Fines	1,15,054	2	9
4.	Fines for the prevention of cruelty to animals	150	0	0
5.	Cash receipts of Record Room	30,666	1	0
6.	Other items	310	6	0
7.	Recoveries of over payments	706	1	0
8.	Collection of payments for services rendered	29	14	0
9.	Recovery in pauper suits	93	8	0
10.	Process server fees	10	8	0
	Total ...	1,55,061	13	6

Expenditure.

		Rs.	As.	Ps.
1.	Pay of officers	1,48,903	2	0
2.	Pay of Establishment	2,16,659	5	0
3.	Pay of Bailiffs (Process server Estt.) ...	32,005	12	0
4.	House Rent Allowance	12,467	15	0
5.	Dearness Allowance	1,75,927	14	0
6.	Travelling Allowance	12,244	15	0
7.	Contigencies	45,526	7	3
	Total ...	6,43,735	6	3

The value of Judicial Stamps sold in the Surat district (by the Ex-Office Stamp Vendor—The Nazir, District Court, Surat) during the year 1956-57 was Rs. 98,270.

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THE POLICE DEPARTMENT

The primary functions of the Police are the prevention and detection of Crime; maintenance of law and order, apprehension of offenders; escorting and guarding prisoners, treasure or private or public property of which they may be placed in charge and the prosecution of criminals. They have also various other duties to perform of which some, such as control of traffic, censorship of plays and other performances, service of summonses in criminal cases and destruction of stray dogs, are imposed on them by law; and others, such as aid to displaced persons and pilgrims and pasport and naturalisation enquires, are entrusted to them for administrative reasons.

Organisation

The Inspector-General of Police is the Head of the Police Department and under him there are nine Deputy Inspectors-General of police each in charge of one of the following divisions: or departments: (1) Criminal Investigation Department; (2) Head Quarters; (3) Poona Range; (4) Bombay Range; (5) Anti-Corruption and Prohibition Intelligence; (6) Nagpur Range (7) Ahmedabad Range; (8) Aurangabad Range; (9) Rajkot Range. Below these officers are the District Superintendents of Police in charge of districts. Under the law, as it stands at present, the Superintendent of Police is an assistant to the District Magistrate for Police purposes, although in matters falling within the jurisdiction of the Inspector-General of Police, he is subject to the general control and direction of the superior Police Officer. In short, while the District Police Forces are under the Inspector-General of Police for the sake of Administrative control, the force in each district is under the working control, of the District Magistrate.

Under Section 17(1) of the Bombay Police Act (XXII of 1951), the District Superintendent of Police and the Police Force of a District are under the control of the District Magistrate. While all questions of policy and administration of law within the district are the District Magistrate's decision, it is the province of the Inspector-General of Police of the State to watch over recruitment, education, housing and equipment of the Police and to regulate their internal organisation and methods of working so as to render them the most efficient instrument possible for the use of the District Magistrate in the safeguard of his charge.

For purposes of Police Administration, the Surat District is divided into three Sub-Divisions each in charge of a Sub-Divisional Police Officer. (Assistant Superintendent of Police or Deputy Superintendent of Police). Each of these three Sub-Division viz: City Division, Northern Division and Southern Division has five Police Stations and two Out Posts, 10 Police Stations and 13 Out Posts, and 11 police Stations and 21 Out Posts respectively. The Police Stations are in charge of Sub-Inspectors of Police and the Out Posts in charge of Head Constable. The Sub-

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divisional Police Officers in charge of Northern and Southern Divisions are each assisted by an Inspector whose designation is Circle Police Officer.

For Political and allied work, there is an Intelligence Branch for the whole district and it is in charge of the Police Sub-Inspector who is responsible to the District Superintendent of Police, Surat.

For the security and verification of passports, there is a Security Branch and for controlling crime in general there is a local Crime Branch in the district. Both these branches are under the direct control of the District Superintendent of Police.

For purposes of recruitment and training of the subordinate Police and other work, there is one head quarters at Surat which is in charge of Home Police Inspector. This headquarters also deals with all matters concerning Arms and Armaments and supply of clothing articles and accoutrement to the subordinate Police in the district.

This district which comprised 12 Police Stations prior to merger in 1948-49, was latter divided into two sub-division. The Bardoli Division comprising six Police Stations and 10 Out Posts was in charge of Deputy Superintendent of Police who was designated as S. D. P. O., with his Headquarters at Surat. The District Superintendent of Police was in charge of the other division comprising six Police Stations and three Out Posts. The District Superintendent of Police and Sub-Division Police Officer, Bardoli, were assisted by one Police Inspector each.

Strength.

With the merger of Bansda, Dharampur, Ahwa, Dangs and Sachin States from December, 1948 and Navsari Prant of Baroda State from August, 1949, the area of this District increased to three fold and hence the strength of the Police Force in the District was augumented. The total sanctioned strenght of the Police personnel in the district was 63 Officers and 1937 men as detailed below :—

			Permanent	*Temporary*
1	District Superintendent of Police	...	1	—
2	Assistant Superintendent of Police	...	—	—
3	Deputy Superintendent of Police	...	3	—
4	Inspectors	...	3	--
5	Sub-Inspectors	...	45	11
6	Unarmed Head Constables	...	200	62
7	Armed Head Constables	...	102	18
8	Unarmed Constables	...	793	170
9	Armed Constables	...	494	78

Due to enforcement of various acts and rules, the Police Force of the district has been temporarily increased as under :—

	Extra Duties	*Officers of and above the rank of Dy.S.P.*	*Officers of and below the rank of P. I.*	*Men*
1	Prohibition	—	9 S.Is.	129
2	L. I. B. Pol. & Security ...	—	2 „	26
3	Mess manager	—	—	1
4	Motor Transport and Motor launches...	—	—	56
	Total ...	—	11	212

The cost of permanent police for the year 1957 was Rs. 16,80,248 and the proportion of police to area worked out to one Policemen to 2.47 square miles.

Regular Duties.

The Superintendent of Police who is the executive Head of the Police Force, is invested with the direction and control of the Police under the control of the District Magistrate, Surat. His primary duties are to keep the force under his control properly trained, efficient and contended and to ensure by constant supervision that the prevention, investigation and detection of crime in his district are properly and efficiently dealt with by the force.

The Assistant or Deputy Superintendents of Police, who are in charge of Sub-divisions are responsible for all crime works in their respective charges. Under the general orders of the District Superintendent of Police they are responsible for the efficiency and discipline of the officers and men in their divisions. They are required to hold detailed inspections of the Police Stations and out posts in their charges at regular intervals.

Surat City, being heavy in crime, has been divided into three Police Stations controlled by a Deputy Superintendent of Police.

In the northern division an Inspector is attached to the Sub-Division with headquarters at Surat and controlled by the Deputy Superintendent of Police. This Inspector has to deal with crime and criminals and to supervise and co-ordinate the crime work of different Police Stations in the Sub-Division. Similarly, an Inspector is attached to the Southern Sub-Division with headquartes at Bulsar and controlled by the Deputy Superintendent of Police stationed at Navsari. His duties are the same as those of the Inspector in northern division.

The Home Inspector of Police who acts as Personal Assistant to the District Superintendent of Police does routine work in the District Superintendent of Police's Office. He has also to look after the general adminstration and working of the head quarters.

The Sub-Inspector of Police is an officer in charge of the Police Station who is responsible for the prevention and detection of crime in his charge. He has also to see that the orders of the superiors are carried out and the discipline of the Police under him is properly maintained.

Unarmed head constables are subject to the orders of sub-Inspectors and other superior officers of the Police Force. They have to report to the Sub-Inspector all crimes in their beats and also to assits him in the investigation and detection of crime. When in charge of a particular post or of villages, the Head Constables act in concert with the heads of the village Police in all Police matters, when attached to a Police Station they hold charge in the absence of Sub-Inspector and look to all routine work including investigation of crime.

Unarmed constables perform such duties as may be ordered by the head constables and Superior Police Officer.

Recruitment

Appointments of Assistant Superintendent of Police are made by the Government of India on the recommendations of the Union Public Service Commission. Before being posted to regular duty, they are trained in the Central Police Training College, Mount Abu. Deputy Superintendents of Police are appointed by the Bombay Government 70% by promotion on merit from the lower ranks of the District Police Force and 30% by direct recruitment.Direct Deputy Superintednents of Police on recruit ment are attached to the Police Training School. Nasik. After completion of their training, these officers are attached to districts for practical training for a period of one year prior to their confirmation.

Inspectors of Police are appointed by the Inspector General of Police and appointments to these posts made by promotion of Sub-Inspectors. Direct appointment of Inspectors is not ordinarily made.

Recruitment of Police Sub-Inspectors is made by the Inspector General of Police both by promotion of Officers from the lower ranks of the District Police Force and by direct recruitment either from outside the Force or from the Police Department. The selection of candidates for the direct recruitment is made by the Inspector-General of Police assisted by a committee of Deputy Inspectors General of Police and Principal Police Training School, Nasik. These candidates are trained at the Police Training School, Nasik, as Sub-Inspectors.

Appointments of Head Constables are made by the District Superintendent of Police ordinarily by promotion from Constables with approved service. Direct appointments as Head Constables are also made by the Range Deputy Inspector General of Police such direct recruitment being restricted to 33-1/3 per cent of the vacancies.

Selection of candidates for the Constable's grade is made by the District Superintendent of Police. Men from the District are generally preferred as they are more likely to have local knowledge and may be able to move about and make enquiries unobserved. Training to the constabulary is imparted at Surat by Officers of Sub-Inspector's rank under the supervision of the Home Police Inspector. Constables are required to pass an examination before they are posted to Police Stations. Police Recruits from Surat Head quarters are sent to Baroda for training in the Regional Training School for a period of six months.

Armed and Unarmed Police

There are two sections of the Police force Armed and Unarmed. The Armed section of the District consists of 126 Head Constables and 572 Constables i.e. a total of 698 men. To the Armed force are allotted the duties of guarding jails and lock-ups and of providing escorts to prisoners and treasure. The unarmed police are drilled so as to give them an upright and manly bearing and to enable them to turn, march and salute smartly and correctly. They are taught squad drill and physical exercise without arms. The Armed Police are instructed in squad drill, physical drill with and without arms, rifle and firing exercises, bayonet practice and fighting, riot drill, dacoit operations, guard and Sentry duty, skirmishing, ceremonial drill, musketry, etc.

Literacy

Against the actual strength of 63 officers and 1937 men in Surat District Police Force, there are 63 Officers and 1857 men who can read and write. Thus the percentage of literacy to actual strength of officers and men worked out to 100% and 95.88% respectively.

Armament

The armament of the Surat district police consists of 695.410 muskets, 691.303 rifles, 52.38 revolver, 32.455 revolver, 9.45 C.M.Ts., 16.22 Rifles.

The district had a fleet of 14 motor vehicles in 1953-54. In addition, there are two motor cycles.

There are two Wireless Stations in the District, one at Surat and the other at Ahwa in Dangs.

War time and other Duties.

During World War II, the Police were called upon to guard vital points, protected places, dams, sluices, etc., arrange for field firing, verify the characters of recruits enrolled in thei military, make enquiries of deserters and absentees from the mili-

tary, registretion of foreigners and make enquiries connected with them, watch the movements of undesirable persons discharged from the army and also of foreigners, make arrangements fot the passing of military convoys and undertake duties in connection with air aaid precautions and lighting restrictions. After the War, they are required to enforce orders issued from time to time in connection with food, rationing, control of prices of Textiles, petrol etc. The Prohibition work was handed over to the Police on September, 15, 1948 and a skeleton staff was provided out of the existing staff of the Excise Department which consisted of 8 sub-inspectors, 10 head Contables and 121 constables including 3 women constables. This force was later augmented by 23 head constables and 103 Constables. In 1949 the Police had to deal with 1433 cases under the Prohibition Laws. With the advent of total prohibition in 1950 the work of police has increased considerably.

Anti-Corruption Branch

There is an anti-corruption branch at Surat under the Director, Anti-Corruption Bureau,. An Inspector is in charge of this branch with two sub-inspectors to assist him.

Railway Police

The railway running through the district are under the charge of the Superintendent of Police, Western Railway, who has a Sub-Divisional Police Officer, to assist him. His charge covers the Central Railway running through the Thana District and Gujarat Range. Two Railway Police Stations are situated in the district of Surat viz., Surat and Bulsar. There are three out post under each Police Station namely Kosamba, Broach, Jaghdia and Navasari, Bilimora, Palghar under the supervision of Police Sub-Inspectors, Surat and Police Sub-Inspectors Bulsar respectively. The Superintendent of Police, Western Railway, is under the general control of the D.I.G.P., Ahmedabad Range and I.G.P. He has however, to obey the instructions of the General Manager of the Railways but may appeal to the Inspector-General of Police, afterwards, if appeal, in his opinion. is necessary.

Crime

The following are the figures of crime for 1957 in the Surat District :—

a.	total no. of non-cognizable cases. ...	7816
b.	total no. of cognizable cases reported to Police	8995
c.	total no. of cognizable cases dealt with by magistrates	2627

The following figures represent the variation in crime during the quinquennicum 1953-57.

	1953	1954	1955	1956	1957
a. non-cognizable Cases	3925	4335	5385	7067	7816
b. police Cognizable Crimes	10088	7331	5099	5961	6496
c. reported Cognizable Crimes	1891	1831	2109	2144	2499
d. magisterial Cognizable Crimes	41	64	40	33	31

Real serious crimes, including (1) murders and cognate crimes (2) dacoities (3) robberies (4) house breaking and thefts (5) thefts including cattle thefts (6) receiving stolen property, and (7) rioting, varied as follows from 1948-57.

1948	... 1722	1953	... 1878
1949	... 2075	1954	... 1817
1950	... 2215	1955	... 2107
1951	... 2301	1956	... 2144
1952	... 2331	1957	... 2499

Incidence of cognizable crimes per 1000 of population varied as follows during the years 1948-57.

1948	... 1.35	1953	... .67
1949	... .72	1954	... .50
1950	... .78	1955	... .60
1951	... .79	1956	... .61
1952	... .83	1957	... 1.36

Prosecuting Staff and Prosecution

In 1949, there were only one senior police prosecutor and 10 sub-police prosecutors in this district. The total number of cases conducted by the prosecuting staff (exclusive of cases withdrawn or pending) was 1804 out of which 1410 ended in conviction. The total number of cases conducted by the executive staff was 1145 out of which 586 ended in conviction.

The post of senior police prosecutor has since been abolished and all are now treated as police prosecutors. At present there are in all 13 police prosecutors in this district.

Housing and Hospital

Quarters have been provided to 42 Police Officers and 1530 Policemen in the district and 21 officers and 407 men are paid house rent ranging from Rs. 3 to Rs. 35. There is a separate Police Dispensary at Police head quarters, Surat, and Policemen are also medically treated at the Civil Hospital in city and Government Medical Hospitals in talukas.

Village Police

The Village Police :—There are Police Patels at each Village whose main duties being revenue but they have to look after Police work also. They are required to collect information regarding suspicious characters and crime and sent it to the Police Stations. They have to keep a strict watch over the movements of notoriously bad characters under the surveillance of the Police. When the patrolling Police visit their villages they have to give all the information they possess about events in their villages. Police patels are assisted in their work by the Village watchmen (*Vethias*).

Homeguards.

The Home Guards :—In pursuance of the Bombay Home Guards Act (III of 1947), the Surat District Home Guards Unit was started in the month of December 1947. It is a voluntary

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body established to supplement the ordinary Police force for the protection of persons, property and public safety, and for such other service to the public as it may be called upon to perform.

The Commandant General is in charge of the Home Guards Organisation in the State and under him are Commandants in each district who control the district staff. The appointments of the Commandant General and Commandants are made by Government from among suitable non-officials and posts are purely honorary carrying no remuneration. The organisation is non-political and non-communal. All members have, on enrolment, to sign a pledge to the effect that they will well and truly serve the Government of Gujarat without fear or affection, malice or ill-will or communal or Political bias and will assist to the best of their ability in the maintenance of peace and prevention of crime against person and property. Any person who is between the ages of 20 and 50 and has studied upto Standard IV in any of the regional language is eligible for enrolment.

The home guards are trained in squad drill, lathi drill, use of arms, control of traffic, elementary law, mob-fighting unarmed combat and guard and escort duties. They are also trained in first aid and fire-fighting. They are encouraged to take up social work. When called out on duty, they enjoy the same powers, privileges and protection as an officer of the Police Force appointed under any Act for the time being in force. Their functions consist mainly of guarding public buildings, patrolling for the prevention of crime and assisting the Police in their ordinary duties. They are issued with uniforms and are paid a duty allowance of Rs. 2.50 per diem whenever they are called out on duty.

Since its inauguration, the Surat District Home Guards Unit has made rapid progress. Units have been established in 12 talukas having one training centre. The following were the centres working at the end of 1957.

1.	Surat	Taluka	Chorasi
2.	Rander		
3.	Sayan	,,	Olpad
4.	Olpad		
5.	Bardoli	,,	Bardoli
6.	Vyara	,,	Vyara
7.	Songadh	,,	Songadh
8.	Navsari	,,	Navsari
9.	Billimora	Mahal	Gandevi
10.	Bulsar	Taluka	Bulsar
11.	Pardi	,,	Pardi
12.	Dharampur	,,	Dharampur
13.	Bansda	,,	Bansda
14.	Chikhali	,,	Chikhali

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169 members of the organisation have completed the training in drill and in the use of fire arms and 267 Home Guards are under training.

At the end of 1957, there were in all 436 Home Guards (males) on roll in the Surat district.

Village Defence Parties.

In addition, there are Villages Defence Parties. This scheme is modeled on the ancient system of Gav Sena, under which at the beat of a drum the villagers used to collect with weapons and help one another against outside aggression.

Each Village Defence Party is under an Officer known as, Kotwal. At the head of the organisation in the Taluka is the 'Assistant Village Defence Officer' who is usually a Head Constable in the taluka. The D.S.P. is in charge of the whole organisation in the district. He is assisted by a Joint Village Defence Officer who is always non-official. Similarly, the Asstt. Village Defence Officer is assisted by a non-official 'Joint Assistant Village Defence Officer'. The non-official officers perform paid service and receive permanent travelling Allowance @ Rs. 22.50 and Rs. 35 as remuneration. They are appointed by the District Superintendent of Police and are subordinate to him.

Every able bodied villager between the ages of 20 and 50 is eligible for membership of a party, provided he is recommended by the Kotwal and other Officers. The training given to members of the Village Defence Party is not as intensive as that given to members of Home Guards Units. They are, however, instructed in the use of arms, drill and lathi drill and are trained together at a given place at the beat of a drum, with available weapons to defend themselves. They are supplied with uniforms but whistles and arm-bands are given to them. They exercise all powers as the Home Guards.

In the Surat district, Village Defence Parties have been organised in 2281 villages and the total strength of parties is 42801. The non-official joint Village Defence Officer of the District is assisted by seven Head Constables and nine Honorary Joint Asstt. Village Defence Officers in organising and running the parties.

THE JAIL DEPARTMENT

JAILS. Location of jail

There is neither a district prison nor a central prison in Surat district. As such prisoners convicted and sentenced for a term exceeding three months are sent to Thana Central Prison if they are casuals and to Nasik Road Central Prison if they are habituals. Short term prisoners of the district with sentences ranging from one week to a month are accommodated in the

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taluka subsidiary jails which are about sixteen and are located at the following places :—

1. Bulsar.	9. Mahuwa.
2. Bardoli.	10. Mandvi.
3. Bansad.	11. Olpad.
4. Chikhali.	12. Palsana.
5. Dharampur.	13. Pardi.
6. Gandevi.	14. Songadh.
7. Kamrej.	15. Valod.
8. Mangrol	16. Vyara.

These sub-jails are classified as III Class sub-jails and the administration of these jails is in the hands of the personal from the Revenue Department.

The jails at Surat and Navsari are classified as second class head quarter sub-jails and are put in charge of a jailor-cum-superintendent who is assisted by a clerk and jail guards from the Department. The number of the guarding establishment (unarmed) is three at Surat and four at Navsari. The guarding of these jails is at present done by the armed guards from the Police Department who are to be replaced by the jail guards (armed) from the Jail Department as soon as suitable housing arrangements are made.

The police lock-ups in the district are under the direct control of the Inspector General of Police, Gujarat State.

Organisation

The Inspector General of Prisons exercises, subject to the orders of the State Government general control and superintendence of all prisons and jails in the State. He is assisted by Deputy Inspector General, Personal Assistant Superintendent of Jail Industries and other office staff members.

The executive officer in charge of a central or district prison is the superintendent who is vested with the executive management of the prison in all matters relating to internal economy, discipline, labour, punishment and control generally subject to the orders and authority of the Inspector-General. Under him are subordinate executive officers like Deputy Superintendent Jailors, Subhedars, Jamadars etc., and ministerial subordinates like steward, head clerk, senior clerk etc. In addtion there are other subordinates like medical officer, compoundres, nursing orderly etc., also at each one of the Central and District Prisons in the State. The convict officers i.e., prisoners promoted to the ranks of convict overseers and night watchmen under the Jail Rules assist the jail guards in their executive duties. The services of well behaved convict overseers are being utilized now for doing petrolling duty outside the sleeping barracks but inside the jail at night time. The main wall and the outer yards are always manned for duty by the guarding staff.

Recruitment.

The post of Inspector General is generally filled in by the appointment of an I.C.S. or I.A.S. Officer, or by promotion from amongst those who are borne on the cadre of the Superintendent of Central Prison, i.e., including the holder of the post of the Deputy Inspector General or by transfer of a suitable officer in Gujarat Medical Service Class I, or by direct recruitment. The Superintendents of Central Prisons are officers promoted from the ranks of Superintendents of District Prisons. The senior-most Superintendent of a Central Prison is usually appointed to hold the post of Deputy Inspector General after consulting the Public Service Commission. The Superintendents of District Prisons are appointed both by direct recruitment or by promotion from amongst Jailors Grade I in the promotion of 1 : 2. Jailors in Grade I are also appointed both by direct recruitment and by departmental promotion in the promotion of 1 : 2. The candidates for direct recruitment to the post of Superintendent of a District Prison and/or Jailor Grade I must be honours graduates and they are recommended for appointment by the State Public Service Commission. A diploma in Sociology or Penology will be an additional qualification. Appointments to Grade II are made by the Inspector General by promotion of Jailors Grade III and appointments to Grade III are made by the Inspector General fifty percent of which are by nomination from amongst candidates from the open market who are necessarily required to be graduates and the other fifty percent of the appointments are given to suitable departmental men who have passed the matriculation examination or its other equivalent examination. The candidates for appointment to the post of Jailor Grade III are interviewed by a Selection Board consisting of the Inspector General and two Superintendents of Prison who are nominated by Government. The posts of sepoys are filled in by direct recruitment and the higher posts from the guarding establishment are generally filled in by promotion according to seniority but if suitable persons according to seniority are not available, appointment to the posts in higher grade are made by selection from amongst the members of the next lower ranks or by nomination of candidates with some high academic qualifications which are fixed for each post in high grade individually.

Appointment to the posts of junior clerks are made by nomination from amongst candidates who must have passed the matriculation examination or its equivalent . Appointments to the ministerial posts in higher grade are made by promotion generally according to seniority from amongst the members of the next lower rank. Medical officers are drafted for service in Jail Department for a period of two years from the Medical Department.

Training.

The Superintendents of Prisons and Jailors receive a theoretical as well as practical training in Jail Officers 'Training School' at Yervada on a scientific basis in all fields of correc-

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tional work. A comprehensive training programme in correctional administration has been prescribed for the said purpose and a vocational course of training has been chalked out which is designed to meet with the actual requirements of Jail guards in discharging their daily duties satisfactorily.

An account test has also been prescribed for Gazetted and non-Gazetted Superior staff of the Jail Department i.e., Superintendents, jailors, stewards, clerks etc. The examination is conducted by the Public Service Commission, Gujarat, for Superintendents including Superintendents of Jail Industries, Jailors in Grade I and II and for members of the clerical cadre from senior clerks onwards and by the Inspector General of Prisons for Jailors Grade III, Junior clerks and technical staff.

A physical training instructor visits the Jails in the State in rotation and imparts training in drill, games and other physical activities both to the inmates of the Jail and also to the Jail Guards.

Thus it will be seen that due care has been taken to see that every jail officer and every jail subordinate gets an adequate opportunity to acquaint himself with the theoretical as well as practical sides of his duties, so that he can discharge them quite satisfactorily. The training programme has in fact gained an important place in the Jail Administration which is aiming at giving a material shape to the cherished idea of Mahatma Gandhi that "imprisonment should primarily aim at treating a prisoner's deseased mine since the crime which he commits is but a sign of a diseased mind, and also making him fit to go into society after his release to lead in honest life".

Guarding Establishment.

Part of the guarding establishment is armed. This section serves as a reserve guard to reinforce the unarmed guards in the immediate charge of prisoners inside the prison or in extra-mural gangs in the event of assault, mutiny, escape or other emergency. It is also available to mount guards over particularly dangerous prisoner or prisoners sentenced to death who are recognised in jail parlance as "condemnded prisoners". The arm guards at main jails except Bombay jails belonged to the Jail Department and those at headquarter and taluka sub jails were drafted for duty from the Police Department. This system of drafting armed guards from the Police Department for guardig duty at certain jails was, besides being uneconimical the source of some avoidable complications particularly on occurance of a mishap like escape of a prisoner. It has, therefore, since been decided by Government to replace gradually the armed guards of Police Department by the armed guards of the Jail Department. The unarmed guards at all the Jails in the State, except Taluka sub-jails belong to the Jail Department. One or more Jail guards are deputed at head quarter sub-jails from the nearest Central, District or Special Prisons.

The period of deputation does not usually exceed three years without obtaining specific sanction of the Inspector General. They wear a prescribed uniform and carry with them while on duty only a baton which also is very sparingly used now-a-days.

Matron

No posts of matrons are sanctioned for headquarter sub-jails but the Superintendent is empowered to engage a matron locally whenever a woman prisoner is admitted to jail. Services of the matron are dispensed with as soon as the woman prisoner is discharged from jail and an extra establishment statement is submitted in her (i.e. matron's) case to the Inspector General for sanction under rule 79(7) of the Manual of Financial powers.

Medical Officer.

No medical staff is sanctioned for headquarter sub-jails but the Bombay Medical Service Officer in charge of the local Government dispensary or the medical officer attached to the Local Board or Municipal dispensary stationed at or nearest to the place where the sub-jail is situated is deemed to be the medical officer of the jail. He receives no extra pay for the jail duty but is entitled to an allowance of Rs. 15 or Rs. 20 p.m. if the daily average number of prisoners in the jail exceeds 40 or 80 respectively. He has to visit the sub-jail regularly at least twice a week and also at such other time as he may be sent for to attend cases of serious illness or to examine newly admitted prisoners. A small stock of medicines is always kept in the sub-jail office to treat minor cases of illness etc., and serious cases are transferred to the local Government dispensary for treatment.

Classification of prisoners.

Prisoners are classified as Class I or Class II after taking into consideration their status in society and also the nature of the offence. They are further classified as casuals, habituals undertrials, and security or detenus. There is no separate class of 'political prisoners' but certain rules which do not allow the grant of facilities and privileges on the score of length of sentence are relaxed in their favour under the specific orders of Government. Prisoners are also grouped as 'short termers, medium-termers and long-termers'. Prisoners with a sentence upto three months are classed as short-termers, those sentenced to three months and above but upto two years are classified as medium termers, and those sentenced to two years and above as long termers. The short termers are given deterrent treatment, while in the case of medium and long termers, paramount importance is given to the reformation of the prisoner. Headquarter sub-jails are meant for the confinement of short term prisoners and undertrial prisoners only.

Jail Reform.

A Jail Reform Committee was appointed by Government in 1946, and in their report dated August 1947, the committee made several recommendations to Government calculated to conduce to the reformation of the prisoner, and Government

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accepted many of those recommendations. The rules for the treatment have been liberalized. The regulations regarding corporal punishment have been tightened and whipping as a jail punishment is now to be awarded in exceptional cases after obtaining prior sanction of Government punishments of penal diet and gunny clothing have been abolished. Rules about letters and interviews have also been liberalized. Only long termers come within the ambit of the rules on the subject. Only short term prisoners are confined in the jails of Surat district.

Work.

Work is arranged according to the prisoner's health. On admission the prisoner is examined by the medical officer who classifies him as fit for light, medium or hard labour. The Work Allotment Committee is constituted for central and district jails, the members of which have to take into account health conditions of the prisoners, their aptitude, past experience etc., and assign suitable work for newly admitted prisoners with a sentence of six months and above. Any changes in the work so allotted to prisoners by the committee have to be effected only with the concurrence of the members of the committee. No such committee is to be appointed for short term prisoners.

ayment of wages.

Long term and medium term prisoners, so also security and undertrial prisoners, who volunteer to work are paid 1/5th of the wages, which are paid normally for similar work outside, provided they complete their daily quota of task to the satisfaction of the authorities concerned.

elease on parole and furlough.

A prisoner may be released on parole in cases of serious llness or death of any member of his family or his nearest rielative or for any other sufficient cause. The period spent on parole will not count as part of the sentence.

The prisoner who desires to be released on parole has to submit his application to the Jail Superintendent who has to endorse his remarks thereon and submit one copy thereof direct to Government and one copy to the Inspector General of Prisons along with the nominal roll of the prisoner concerned. Prisoners who apply for parole on false grounds or who abuse the concession or commit breaches of any of the conditions of parole are liable to be punished. Enquiries as regards genuineness or otherwise of the grounds advanced in the application are made through the local Revenue and Police Officers.

Prisoners with a sentence of one year and above are entitled to being released on furlongh for a period of two weeks which will be counted as a part of his sentence.

Board of Visitors.

A Board of Visitors composing official and non-official visitors is appointed for every headquarters jail and taluka sub-jails. There are ordinarily four non-official visi-

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tors for headquarter sub-jail out of which two are members of the State Legislature and two are nominated by Government of whom one is a lady visitor. The appointment of non-official visitors other than members of the State Legislature is made for a period not exceeding three years Persons who in the opinion of Government are interested in the Prison administration and are likely to take interest in the welfare of prisoners both, while they are in Prison and after their release, are nominated by Government on the Board of Visitors on the recommendation of the District Magistrate concerned and the Inspector-General of Prisons. The chairman of the Board of Visitors who is usually the District Magistrate of the district arranges for a weekly visit to the Prison by one of the members of the board. Quarterly meetings of the whole Board are also convened. Non-Official visitors are also allowed to visit Prison on any day at any time during the day in addition to the weekly visit arranged by the Chairman The Board records in the visitor's books its observations on the result of the detailed inspection of the jails. Any remark at the quarterly meeting or at the weekly visits deserving special and prompt disposal is immediately forwarded by the Superintendent to the Inspector-General for necessary orders. Other remarks made by the visitors and the quarterly committee of visitors are forwarded immediately after the end of the month by the Superintendent of the Inspector-General with such remarks as he may desire to offer.

In bigger jails a committee of prisoners is selected for each yard by the prisoners themselves, and the jailor and the Superintendent consult the committee which is known in jail parlance as 'Jail Panchayat Committee' in matters of discipline and general welfare of prisoners.

Education.

Literacy classes are conducted for those prisoners who are ignorant of the three R's. under the supervision of literate convicts and paid teachers who are appointed only at some of the main jails in the State. Regular annual examinations are held in the jail by the Deputy Educational Inspectors. As remuneration for conducting Literacy classes in jail an amount is received as grant-in-aid from the Education Department, 25·/. of which is given to the convict teachars as an encouragement after the quarterly examinations of the students (prisoners) are held and the rest of the amount is utilized towards the purchase of books, boards etc. required for the literacy classes. Films of educational and reformative values are also exhibited by the District Regional Publicity Officer concerned.

Daily Routine.

The daily jail routine extends from 5.15 A.M. to 9.30 P.M. The actual working hours are from 8.15 A.M. to 10.45 A.M. and 11.45 A.M. to 4.15 P.M. (i.e. 7 hours in all) and other parts of routine include time for meditation, congregational prayers,

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physical training, games, social adjustments, talks, signing of devotional songs, education classes and reading of news-papers and books. Central and district prisons in the State have extensive factories comprising various sections like textile, carpentry, smithy, *mochi* etc. Prisoners in head-quarter sub-jails are employed in gardens attached to the jail prison services like sweeping of barracks, kitchen, conservancy etc., and on works like manufacture of narrow tape, cot tape, etc.

The authorised accommodation, daily average population of the headquarter sub-jails in Surat district for the year 1957 was as under :—

Name of Jail.	Sanctioned accommodation.			Daily average No. for the year '57.		
	Males.	Women.	Total.	Males.	Women.	Total.
1. Surat sub-jail (2nd class head-quarter, sub-jail)	90	16	106	174	9	183
2. Navsari sub-jail. (3rd class headquarter sub-jail)	90	10	100	93	2	95

JUVENILES AND BEGGARS DEPARTMENT

Juveniles and Beggars Department. Legislation.

In Bombay State there were three pieces of Social Legislation the aim of which was to protect children and to prevent juveniles, adolescents and young adults from becoming habitual criminals, and they are:—(1) the Bombay Children Act (LXXI of 1948); (2) the Bombay Borstal Schools Act (XVIII of 1929); and (3) the Bombay Probation of Offenders Act (XIX of 1939). While the Children Act deals with children below 16 years of age, the Borstal Schools Act is applied to adolescents between 16 and 21, and the Probation of Offenders Act provided for offenders of any age, especially those between 21 and 25 and those who have not committed offences punishable with death or transportation for life. In addition there is the Bombay Habitual Offenders Restriction Act (LI of 1947). This Act was passed with a view to making provision for restricting the movements of habitual offenders, for requiring them to report themselves, and for placing them in settlements.

Children Act.

The Bombay Children Act consolidates all previous laws relating to the custody, protection, treatment and rehabilitation of children and youthful offenders and also for the trial of youthful offenders. It gives protection to four principal classes of children, viz., (1) those who are neglected, destitute or living in immoral surroundings and those in moral danger; (2) uncontrollable

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children who have been reported as such by their parents; (3) children, especially female children who have been used for begging and other puropses by mercenary persons; and (4) young delinquents who either in the company or at the instigation of older persons or by themselves have committed offences under the various laws of the land. Such children are taken charge of either by the police or by officers known as "probation officers" and in most cases are kept in "remand homes". A remand home is primarily meant as a place where a child can be safely accommodated during the period its case is being consideraed and it is also meant to be a centre where a child's character and behaviour can be minutely observed and its needs fully provided for by wise and careful consideration. After enquiries regarding their home conditions and antecedents have been completed, they are placed before special courts known as "juvenile courts", and dealt with according to the provisions of the Children Act. If the home conditions are found to be satisfactory, and if what is needed is only friendly guidance and supervision, then the children are restored to their parents and placed under the supervision of a trained probation officer. If the home conditions are unwholesome and uncongenial, the children are committed to institutions known as "certified schools" for "fit person institutions". "Fit person institutions" include any association established for the reception or protection of children. At these schools or institutions the children receive training according to their individual aptitudes, in carpentry, smithy, book-binding, tailoring, agriculture, poultry-farming, goat-rearing, gardening, cane-work, knitting, etc. Youthful offenders, when implicated in any offence along with adult offenders, have to be tried separately in juvenile courts without the paraphernalia of criminal courts. The technique employed in juvenile courts is entirely different from that in adult courts. Penal terms are avoided, and even the word "punishment" has been dropped from the enactment in describing the treatment to be meted out. The children are regarded only as victims of circumstances or of adults.

Borstal Schools Act

Adolescent criminal coming under the Borstal Schools Act are sent for detention and training in the Borstal School. Factory work and agriculture form two main heads of vocational training. Weaving manufacture, of furniture, stationery and buttons, and smithy are some of the other vocations taught. The adolescents sent to this school are given such individual training and other instruction and are subjected to such disciplinary and moral influences as will conduce to their reformation. However, boys found to be too incorrigible or unsociable to be kept in the Borstal school are transferred to the juvenile section of the prision at Yervada. Similarly if the Inspector General of Prisons thinks that any prisoner in the juvenile section can be better treated to his advantage if he is sent to the Borstal School, he is accordingly transferred. Both

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juveniles and adolescents, wh n they have finished a certain period of residence in the institutions to which they are sent and acquired some proficiency in a trade, are released, under a licence as prescribed in the rules, to live in their homes, or, if they are destitute, in "after-care hotels" (institutions run by non-official agencies), under supervision, and efforts are made to find employment for them.

Machinery to enforce legislation.

For the proper enforcement of the legislative enactments mentioned above, machinery, both official and non-official, is provided. The non-official machinery is provided by the State Probation and After-care Association, with a network of affiliated bodies called the District Porbation and After-care Associations which are actively functioning in a few districts of the State. These associations provide "remand homes" and "after care hostels" and also employ probation officers to make enquiries regarding the home conditions and antecendents of children and also to supervise the young persons released either directly by courts or on licence from certified schools and the Borstal School. As regards the offenders dealt with under the Probation of Offenders Act, the work of the District Association consists only in making preliminary enquiries regarding the cases of alleged offenders referred to them and carrying on, in selected areas, supervision of offenders released on probation.

The official agency is the Juvenile and Beggars Department. Until 1934, the Juvenile Department, as it was then known, was controlled by the Educational Department but from April 1934, it was attached to the Backward Class Department under the control of the Home Department. The Backward Class Officer was designated as Chief Inspector of Certified Schools. In March 1946, the administration of the Bombay Beggars Act (XXIII of 1945), was added to the duties of the Backward Class Officer. As work increased and the Backward Class Officer could not be expected to devote much attention to the expansion of work under the social laws relating to children, from June 1947, the tuvenile branch, the Bombay State Probation and After-care Association, and the Beggars Branch were divorced from the control of the Backward Class Officer and these three branches were constituted into a separate department called "the Juvenile and Beggars Department" under a full-time Chief Inspector of Certified Schools and Chief Inspector of Certified Institutions. This officer is under the control of the Labour and Social Welfare Department of the Secretariat so far as the administration of the Children Act and the Bombay Beggars Act is concerned. The Home Department of the Secretariat, which deals with the Probation of Offenders Act, guides and controls his activities in relation to that Act.

So far as the Surat district is concerned, the Beggars Act has not yet been applied to any part of it. There are no institutions

for beggars either run by Government or certified under the Act in the district of Surat.

The Children Act was applied in 1940 to the city of Surat and the village of Athwa, Katargam, Khatodra, Tunki Majura, Adajan, Umarwada and Nawagam in the Chorasi taluka and in 1942 to the municipal district of Rander in Surat District.

A probation Officer of the Government cadre is deputed by the Chief Inspector of Certified Schools to the District Porbation and After-care Association, Surat. The District Porbation and After-care Association, Surat has also appointed a direct recruit. The Probation Officers have to assist the Juvenile Court Magistrate in disposing of cases under the Bombay Children Act. They have to manage the Remand Home and to attend also to the routine work of the association.

The duties of Porbation Officers are—

(1) to study the children that are brought before the Juvenile Court and to submit reports regarding them to the court suggesting a treatment programme;

(2) to supervise the children placed under their supervision by the Juvenile Court;

(3) to conduct inquiries regarding applications received by the Juvenile Court;

(4) to conduct the inquiries referred to the District Porbation and After-Care Association by other institutions in respect of children and beggars;

(5) to conduct inquiries regarding children proposed to be released on licence from different certified schools and the Borstal School, and to supervise such children as are released on licence;

(6) to conduct inquiries and supervision work under the Probation of Offenders Act and

(7) to do propaganda work to further the objects of the legislation relating to children and youthful offenders.

Although the Act contemplates the establishment of a separate Juvenile Court in each district, as yet no full-time Magistrate has been appointed for Surat. The local Judical Magistrate, First Class, at Surat works as the presiding officers of the Juvenile Court. The Juvenile Court is held once a week in the Remand Home, to dispose of cases under the Bombay Children Act. One or two lady honorary magistrates advise the presiding officer of the Juvenile Court in respect of the disposal of cases under trial.

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There is a remand home for boys and girls at Anikwadi, Athwa Lines, Surat, run by the District Probation and After-Care Association, Surat.

Certified Schools.

There is only one Government Certified School at Popawala Estate, Katargam, Surat. The maximum accommodation is for 100 boys of all communities aged 7 and upwards. The medium of instruction is Gujarati.

The following trades are taught in the school :—

(1) Tailoring.	(5) Carpentry.
(2) Spinning.	(6) Gardening.
(3) Cot tape an	(7) Laundry.
(4) *Asan* Making.	(8) Cooking.

There are no private certified schools in this district.

Fit Person Institution.

There are the following two fit person institutions in this district, viz.,

(1) The Mahajan Anath Balashram, Katargaum, Surat, and (2) the Parvatibai Leprosy Hospital and the Lady Wilson Leprosy Clinic, Katargam, P. O.—Surat.

After-Care Hostel.

There is no after-care hostel run by the District Probation and After-Care Association, Surat.

Habitual Offenders Restriction Act

Unlike the Criminal Tribes Act, which has been repealed, the Habitual Offenders Restriction Act is made applicable to persons of all castes and communities alike, and restrictions are imposed only after judicial enquiry as prescribed under the Act.

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THE DEPARTMENT OF LAND RECORDS

THE LAND TENURE PREVALENT IN SURAT DISTRICT is rayatwari except for a few *inam* villages of class II, III, and IV villages. There are also Jagiri villages (52) in Dharampur taluka. The land tenure is based on land survey and soil classification and the settlement of the land revenue for each individual fields separately.

Special tenures : jagiri, vazifdari and watandari tenures which prevailed in Dharampur and Bansda talukas and the former Baroda State areas were abolished under the Bombay Merged Territories and Areas (Jagiri Abolition) Act 1953 and the Bombay Personal Inams Abolition Act 1952. Other inams viz., Saranjam and Political Inams ; Pargana and Kulkarni Watan Inams, etc. have similarly been abolished under recent legislation.

A brief note on the special tenures and reasons for abolishing them is given below :—

Survey

There are in all 76 Jagiri villages in this district. Out of these, 34 villages are surveyed and settled under the ex-State laws and rules, 41 villages are surveyed but unsettled and one totally unsurveyed and unsettled. Under the jagirdari system the parity of assessment is not maintained because the jagirdars of these villages levied assessment on the basis of the *holbandi* system. Under the holbandi system the assessment was based on the number of ploughs employed without having regard to the extent and area of the holding. This system was unscientific and inequitable. Some jagirdars did not care to recover the assessment and many persons cultivated lands without paying any land revenue to the jagirdars.

Since the passing of the Jagir Abolition Act, 1953, Government have issued orders under para 1(4) of the Government Circular Memorandum Revenue Department No. JHR.-1055-M (Spl) dated 6th June, 1955 limiting the land revenue recoverable from occupants in the jagiri villages to the cash equivalent of 1/16th of the gross produce of the land. This order was enforced from 1st August, 1954. If the amount recovered by the jagirdars prior to the abolition of the jagirs was less than the cash equivalent of the 1/16th of the gross produce of the land that leavy is to continue till the ad hoc assessment is fixed under section 7of the Bombay Merged Territories andAreas (Jagiri Abolition) Act.

In furtherance of the policy of Government to abolish the intermediary agencies between the tillers of the land and

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Government, various legislations have been abolishing various types of tenures. The following apply to Surat district.

(1) The Bombay Bhagdari and Narwadari Tenures Abolition Act, 1949.

(2) The Bombay Pargana and Kulkarni Watans Abolition Act, 1950.

(3) The Bombay Personal Inams Abolition Act, 1952.

(4) The Bombay Saranjam, Jagiri and other Inams of Political Nature Resumption Rules, 1952.

(5) The Bombay Merged Territories and Areas (Jagir Abolition) Act, 1953.

(6) The Bombay Service Inams useful to Community (Gujarat and Konkan) Resumption Rules, 1954.

(7) The Bombay Merged Territories Miscellenous Alienation Abolition Act, 1955.

The implementation of all these Acts is at present in progress.

Land Revenue Settlements.

The original survey settlements in the pre-merger areas of Surat district were introduced between 1863 to 1877. The first revision settlements, now in force, were introduced between 1896 to 1900. The survey was carried by chain and cross staff. The unit of area adopted being the English acre with its subdivision, the guntha (121 sqare yards) in a square formed by 1 chain by 1 chain, 40 gunthas making 1 acre. The area of each survey number and its sub-divisions, if any, are separately entered in the land records under indicative numbers.

As regards the merged areas of the former Baroda State, the first revision settlements were introduced in the years shown below :—

Kamrej:	1909-1910	Mangrol:	1911-1912	Palsana:	1910-1911
Navsari:	1890-1891	Mahuwa:	1915-1916	Bansda:	1923-1924
Gandevi:	1906-1907	Vyara:	1906-1907	Songadh:	1902-1903
Sachin:	1918-1919				

The unit of measurement adopted in the former Baroda state areas is *bigha* measuring 23½ gunthas.

As the old survey of the former Dharampur State is considered to be obsolete and out-dated, a special party under the supervision of the Survey Mamlatdar has been appointed for verification of boundaries and partial survey. As a scientific settlement on the Bombay lines had not been introduced, steps are being taken to get the lands classified. There are four unsurveyed

villages in Bansda taluka and one unsurveyed inam village in the former Dharampur State and survey operations are also in progress in these five villages under the supervision of the Survey Mamlatdar. Till the regular settlement in the former Dharampur State villages is introduced, an ad hoc settlement undera Land Revenue Rule 19-Oand 19-N for the State and Jagiri villages is in progress.

Village, Talukas and District Maps for all Surveyed Villages.

Accurate village maps (generally drawn to a scale of 1" equal to 20 chains) have been prepared for all the surveyed villages, showing the survey numbers and their boundary marks and other topographical details such as roads, nalas, etc. From these village maps, taluka and district maps have been prepared on a scale of 1" equal to 2 miles. Village maps are stocked in the District Survey Office (Record Rooms) for sale and supply to Government offices. Taluka and district maps are stocked with the Director, Government Printing and Stationery. Every year in consultation with all District Officers, the Executive Engineer, the District Police Superintendent, the Civil Surgeon, the President of the District Local Board etc. information about corrections to be incorporated in the district map is collected by the survey office and the map is maintained up to date.

Classification.

The main classes of lands recognised are dry crop, rice and Garden (bhatta and dhokudiat). Each field is classified with reference to the texture of the soil and its depth and presence of sub-soil water or other advantages or/and deteriorating factors, if any. In the case of "Rice" lands, in addition to the soil factor the water supply by the dhokudies (water lifts set up near a river or stream or tanks) if any has been classified with reference to its source and duration and the crops grown.

In addition to these, however there is a separate class of land in Surat District called "Natural Bagayat" which is divided into the following sub-classes.

NATURAL BAGAYAT

- Uttam Bagayat
  - Ordinary
  - Dhokudiat.
  - Rice.
    - Old
    - New
- Uttam Prakar
  - Ordinary
  - Dhokudiat
  - Rice.
    - Old
    - New

This term is applied to the extraordinary rich class of garden land, which is found chiefly in the talukas of Bardoli, Chikhali,

Pardi and Chorasi. For classification of such lands, the ordinary factors in addition to supply of fresh water at a depth of not more than 30 feet are taken into account. The classification value is expressed in terms of annas, 16 annas representing the standard. The original soil classification when confirmed or made during revision survey is treated as final and no further general reclassification is to be made at any future revision settlements (vide Section 106 L.R.C.). The holder is, however, entitled to ask for the reclassification of his land in case of physical deterioration and consequent reduction of assessment.

All improvements made at the cost of the holder are exempted from taxation for a period of 30 years immediately preceeding the year in which settlement is introduced. Thereafter they are liable to taxation.

Settlement and Assessment.

Prior to 1939, the settlement procedure was prescribed by administrative orders of Government under the Land Revenue Code. The settlement procedure was first brought on to the Statute Book under the Amendment Act, 1939, (Bombay XX of 1939). Under the L.R.C. Amendment Act. XXVIII of 1956, certain changes have been made in the settlement procedure. The changes in brief involve a shift in emphasis from the general economic conditions of the area and rental values to the prevalent prices and yields of principal crops. The various provisions governing the settlement procedure are contained in Chapter VIII-A of the Land Revenue Code and Chapter III-A of the Land Revenue Rules. The prescribed procedure is, in brief, as under :—

"Settlement" is defined as the result of operations conducted in a zone in order to determine the land revenue assessment [Section 117 C(1)].

"Zone" is defined as a local area comprising a taluka or a group of talukas or portions thereof of one or more districts which is contiguous and homogeneous in respect of :--

(*i*) Physical configuration,
(*ii*) Climate and rainfall,
(*iii*) Principal crops grown in the area, and
(*iv*) Soil characteristics.

[Section 117 C (1 A)].

The Settlement Officer (appointed by the State Government under Section 18 L.R.C.) examines fully the past revenue history of the Zone with a view to assess the general effect of the incidence of assessment on the economic conditions of the zone. He then proceeds to divide the lands to be settled into groups and fix the standard rates for each class of land in such groups.

The groups are formed on a consideration of the following obligatory factors viz :--

(*i*) Physical configuration,
(*ii*) Climate and rainfall,
(*iii*) Prices and
(*iv*) Yield of principal crops.

If the Settlement Officer thinks it necessary to do so, he may also take into account the factors specified in clause (*a*) (*i*) of the proviso to the sub-section (2) of Section 117 G viz.

(*a*) Markets,
(*b*) Communications,
(*c*) Standard of husbandary,
(*d*) Population and supply of labour,
(*e*) Agricultural resources,
(*f*) Variations in the area of occupied and cultivated lands during the last 30 years,
(*g*) Wages,
(*h*) Ordinary expenses of cultivating principal crops, including the wages of the cultivator for his labour in cultivating the land,
(*i*) Sales of lands used for agriculture.

[Section 117 G — (2)].

"Standard rate" is defined with reference to any particular class of land in a group, as the value of one-sixteenth of ethe average yield of crops per acre on land in that class of sixteen annas classification value. [Section 117 C (5)].

Improvements made at the cost of the holders are exempted from enhancement of assessment for a period of 30 years immediately preceding the date on which the settlement expires (Section 117-H). The Settlement Officer is required to formulate his proposals for settlement on the above basis and submit a comprehensive report, to the Collector(s) concerned. The report would contain :—

(*i*) the various statistics and data collected by him in the prescribed forms ;

(*ii*) A statement showing the effect of his proposals as compared to that of the previous settlement in force (Land Revenue Rule 19-B(1).

The settlement report is published in the regional language in each village in the prescribed manner, together with a notice

stating the existing standard rates for each class of land and the extent of increase or decrease proposed by the Settlement Officer. A period of three months from the date of notice is allowed for any objections to the settlement proposals. (Section 117-J).

Provision is made for referring settlement proposals to the Revenue Tribunal by the State Government at the instance of aggrieved persons (who have to deposit the prescribed amount of cost) within two months from the date of the notice. (Section 117-K.).

After taking into account the objections, the Collector forwards the Settlement Officer's report to the State Government through the Settlement Commissioner and Director of Land Records, with his remarks. (Section 117-K).

The settlement report together with the objections and the recommendations of the State Revenue Tribunal is required to be placed on the table of each chamber of the Legislature and the proposals can be discussed in the Legislature. (Section 117-L).

Thereupon, the State Government passes final orders on the settlement report (Section 117-L) and, after a notice of the orders has been given in the prescribed manner, the settlement is deemed to have been introduced. (Section 117-O).

The assessment to be imposed on each holding in the case of an original settlement is determined by the application of the standard rates to the classification value of the land through the medium of Jantris (table of calculation) prepared by the Superintendent of Land Records, and in the case of a revision settlement, it is worked out by increasing or decreasing the old assessment in the same proportion as there is an increase or decrease in the new standard rates over the old ones. (Land Revenue Rule 19-H).

A settlement ordinarily remains in force for 30 years. (Section 117-E).

Government may after the expiry of every ten years from the date on which settlement was introduced under Section 117-O enhance or reduce the assessment on lands in any Zone by placing a surcharge or granting a rebate on the assessment by reference to the alterations or prices of the principal crops in sucn Zone. (Section 117-M).

Additional water advantages accrued at the cost of Government can be assessed during the currency of the settlement. (Section 117-Q).

The current settlements have expired in all the talukas since long.

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Two Settlement Officers are working in Surat district for revision settlement on the basis of the L.R.C. Amendment Act of 1956. They have taken up the work in Mandvi, Mangrol, Songadh, Vyara, Valod, Navsari, Chikhali, Bansda and Dharampur talukas.

Record of Rights.

The Record of Rights represents the final and logical conclusion of the rayatwari system that predominantly prevails in the State. Under the rayatwari system a complete record of Rights and liabilities in respect to occupied land is indispensible both for the security and certainty of title as well as for the collection of land revenue. At the original survey and settlement, the survey number was the unit of assessment. No sub-divisions were allowed, but this proved a failure in co-ordination with Hindu and Muslim Laws, which permits partition due to inheritance etc. from time to time. Hence the necessity of the Record of Rights was felt. The Famine Commission of 1897 also strongly urged for such law. The Record of Rights Act (Act IV of 1903) was then enacted but it was a purely statistical Record of Rights. Therefore the Record of Rights law was amalgamated with the Land Revenue Code by Act IV of 1913 (Chapter X-A Section 135 A to L) whereby the Record of Rights became the record of liabilities also.

The fundamental idea of the Record of Rights is that all sorts of rights and liabilities in respect of each parcel of land are to be recorded in document maintained in the village itself by the Talati. The record gives particulars of all private rights and possession over each parcel of land (rights and possessions acquired by succession, inheritance, partition, purchase, mortgage, gift, lease etc.) and also possession even though obtained illegally, violently or fraudulently, is also to be recognised (R.A.M. page 59, 1951 Edition).

Under the law an entry in the Record of Rights is presumed to be true till the contrary is proved. In view of its supreme importance, it is necessary that the Record of Rights should be kept up -to- date and accurate.

The Record of Rights has been introduced in all talukas of the district.

According to Section 135(B) 1 of Land Revenue Code, the Record of Rights is to contain the following particulars :—

(*a*) the names of all holders, occupants or mortgages of land or assignees of the rent or revenue thereof ;

(*b*) the nature and extent of their respective interest and conditions of liabilities attached thereto, if any ;

(*c*) the rent or revenue, if any, payable by or to any of such persons and ;

(*d*) such other particulars as the State Government may prescribe under the rules and circulars issued in this behalf.

Under Section 135-B(2), the State Government has now applied the above law to tenancies as well (R.2252/49 dated 29th February, 1950).

Every acquisition of a right in land is to be reported to the village officers by the person acquiring it, unless it is acquired by a registered deed (B. R. C. 135-C). Failure to report such acquisition is made liable to fine, by way of levy of late fees for entering such rights in Record of Rights (L.R.C. Section 135-F).

Land Records Department.

The Land Records Department was created in 1884 when the revision survey and survey and settlement operations were nearing completion and the old Survey and Settlement Department was being brought to a close.

Its Functions are.—(1) to collect and provide statistics necessary for the sound administration of all matters connected with land ;

(2) to help to reduce, simplify, and cheapen litigation in revenue and Civil Courts by providing reliable survey and other records;

(3) to supervise the preparation and maintenance of Record of Rights for the protection of those, who held only title to, or interest in land ;

(4) to conduct all the periodical revenue settlement operations in the State ;

(5) to conduct periodical inspection and repairs of boundary marks ;

(6) to maintain up to date all survey and classification records, by keeping very careful notes of all changes, by regular field operations ;

(7) to organise and carry out village site and city survey (on an extensive scale) and arrange for their proper maintenance ;

(8) to undertake special survey for private individuals and for public bodies (such as survey of *inam* villages, survey in connection with railway, Municipal, Local Board projects and town planning schemes and for Defence and other Government Departments) ;

(9) to maintain up to date village maps and to arrange for their reprinting when necessary and their distribution to various Government Departments for administrative purposes and also for sale to the public ; and

(10) to train the revenue officers in survey and settlement matters.

Organisation.

The District Inspector of Land Records, Surat is the principal officer in charge of the Land Records Department in this district. He is a gazetted officer (of the rank of the Mamlatdar) appointed by the Settlement Commissioner and Director of Land Records and directly subordinate to the Superintendent, Land Records, Ahmedabad. He is also subordinate to the Collector of Surat and has to carry out his administrative orders with regard to survey and land records.

This district is one of the biggest districts in the State comprising 18 talukas. It is also thickly populated. Prior to the merger of States, there were only nine talukas, but due to the merger of the four Baroda State talukas and five talukas of Sachin, Dharampur and Bansda States, it now consists of 18 talukas. His subordinate staff consists of :—

(*a*) two permanent clerks ;

(*b*) measurement staff comprised of ;

(1) One District Surveyor.
(2) Eleven Cadastral Surveyors (Permanent)
(3) Six Cadastral Surveyors (Temporary)

(*c*) District Survey Office at Jalalpore, staff consisting of :—

(1) One Headquarters Assistant.
(2) One Head Record Karkun.
(3) Two Record Keepers. }
(4) Two Scrutiny clerks. } (Permanent).
(5) Two Utara Karkuns. }
(6) Two Daftarbands }

(*d*) (1) Eight Maintenance Surveyor (Permanent).
(2) One Maintenance Surveyor (Temporary).
(3) One maintenance surveyor and rent collection Clerk (Temporary).

(*e*) (1) ten Pot Hissa surveyors. }
(2) one Pot Hissa nimtandar. } (Temporary).
(3) one Pot Hissa survey clerk. }

(*f*) and the staff of 60 Circle Inspectors (including C. Os and Gram Savaks under National Extension Scheme) working under the Collector.

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The staff shown under (a), (b), (c) and (e) above, works directly under the District Inspector of Land Records, Surat while that shown against (d) works under the revenue officers in charge of city surveys. The staff at (f) works under the control of the Collector.

The Headquarters of the District Inspector of Land Records is at Surat.

Duties and functions of the District Inspector of land Records and his Staff.

The main duties of the District Inspector of Land Records are as under :—

(*a*) to supervise and take field test of the measurement, classification and Pot Hissa work done by the district staff ;

(*b*) to exercise check over proper and prompt disposal of all measurement and other works done by the staff of surveyor and District Survey Office Establishment, by scrutinising their diaries and monthly statements ;

(*c*) to take practical test of the work of as many Circle inspectors, Village Officers as possible with a view to see that they understand their duties in respect of the Record of Rights, the tenancy and crop registers and boundry marks repair work, etc. During his village inspection the District Inspector also sees that the Government waste lands are not being unauthorisedly used ;

(*d*) to see that the theodolite stones fixed during survey (on the miner tringulation method) are kept in order and to arrange regular inspection and replacement where necessary.

(*e*) to maintain the accounts and watch the recovery of the City survey and Pot Hissa and Dues.

(*f*) to compile the District Statistical (Agriculture Returns No. I, II, III,) Returns with the clerical aid placed at his disposal by the Collector.

(*g*) to inspect the city survey offices in the district once every year ;

(*h*) to arrange (in consultation with the Collector) for the training of the Junior I.A.S. Officers, the District Deputy Collectors and the candidates for the posts of Mamlatdars as well as the Circle Inspectors, clerks and Talatis in survey and settlement matters ;

(*i*) to advise the revenue officers in the district in all technical matters concerned with the maintenance of the survey records and the Record of Rights and to refer all cases of doubt to the Superintendent of Land Records ; and

(*j*) to maintain all the district, taluka and village maps up to date and arrange for heir printing.

District and Cadastra Surveyors.

The staff of the District and Cadastral Surveyors deal with the routine work of measurement and classification, whether required to be done for Government (*i. e.* inland acquisition cases) or on payment of prescribed fees for private parties, and in civil court partition decree etc. Following field measurement work in fair season the necessary changes are effected in the survey records in preparing *Kamjasti patraks* during the following monsoon season.

District Survey Office and Headquarters Assistant

The District Survey office is in charge of the Headquarter Assistant who acts under the orders of the District Inspector of Land Records. He and his staff are responsible for keeping the survey record in proper order and maintaining them up to date. The Headquarters Assistant also deals with all the correspondence work and during the District Inspector's absence may dispose of the urgent cases on his behalf in urgent circumstances. He recovers and accounts for the fees for private measurment work, issues certified extracts from the survey records and supplies printed maps to the applicants on payment of prescribed charges.

The headquarters assistant and his staff are responsible for issuing the measurement cases to the District Surveyor and Cadastral Surveyors and they are to watch their proper and prompt disposal. The Cadastral Surveyors field work is subject to scrutiny in the District Survey Office and action taken to get necessary changes in the survey records. During the monsoon season *Kamjasti patraks* are prepared (with their abstracts) signed by the District Inspector and countersigned by the Superintendent of Land Records and *akarphod partaks* signed by the District Inspector are sent to the Revenue Authorities for making necessary corrections in the village and taluka accounts and other revenue records and maps.

Maintenance Surveyors.

They are responsible for the maintenance of city survey (introduced under section 131 Land Revenue Code) by keeping up to date the property register and the records including Records of Rights maps, and to assist in the revenue administration of the city surveyed areas. They work under the immediate control of the revenue officers in charge of the city survey, but the technical and administrative control over them vests in the District Inspector of Land Records and Superintendent of Land Records.

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LAND RECORDS

City Surveys have been introduced in Surat city and the following important towns of the district in the year noted against them below :—

S. No.	Name of the City	Year of Introduction		Staff	Remarks
		Original	Revision		
1.	Surat City	1865—66	1924—25	5 M. S.	
2.	Bulsar City	1870	1920	1 M. S.	
3.	Gandevi	1921—22	—	1 M. S.	Ex Baroda State.
4.	Bilimora	1926—27	—		
5.	Navsari	1913—14		1 M. S.	,,
6.	Kathor	1920		1 M. S. (he also works some period in the year as Maintenance Surveyor Navsari)	,,
7.	Rander	1871—72	1924—25	1 M. S. (he is in the grade of Rs. 46-3-85 and works as R. C. C.)	

City Survey of Bilimora, Gandevi, Navsari and Kathor were introduced during the ex-Baroda State regime.

The following are the eight surveyed village sites in this district.

Name of the village	*Year of the Survey*	*Name of the Village*	*Year of Survey*
1. Godsamba ...	1926	2. Alipore ...	1927
3. Degam ...	1927	4. Vapi	1904-05
5. Pardi ...	1904-05	6. Udwada ...	,,
7. Motiwada ...	,,	8. Ambach ...	,,

The municipalities of Surat, Rander and Bulsar towns have borne the cost of survey. They contribute towards the cost of maintenance at present as shown below :—

Surat Rs. 720 per annum

Rander Rs. 60 per annum

Bulsar Rs. 627-12-0 per annum

In Government Resolution Revenue Department No. B.-586 dated 11th April, 1932 it was decided that the municipalities should be given a share in the proceeds of fees in proportion to the cost of maintenance borne by each body.

The village site surveys are being maintained by the revenue talatis and circle inspectors and not by the Land Records personnel.

Pot Hissa Surveyors

A party of 10 *Pot Hissa* Measurers with one Nimtandar and one *Pot Hissa* Survey Clerk have been appointed during the year 1953-54, specially for merged State areas. The staff of Pot Hissa Surveyors does the measurement work of the sub-divisions of survey numbers for keeping the Record of Rights up to date and during the following monsoon season they do the office work involved in the working out of the hissawar assessments, the preparations of duplicate sketches and Akarphod statements etc. for the use of village officers. The cost of subdivision measurement is recovered from the land holders under Section 135 G(b) of the Land Revenue Code.

Circle Inspector.

The staff of circle inspectors work under the control of the Mamlatdar and they are primarily meant to assist the Revenue Officers in keeping the village records up to date. They supervise the work of the village officers, the technical work for maintaining the land records at the village up to date being supervised by the District Inspector of land Records. Their diaries are submitted through the District Inspector of Land Reocords.

Post-war Reconstructions Scheme;

In addition to the normal duties, the Land Records Department is also responsible for the execution of three Post war Reconstruction Schemes in the Surat district.

Scheme No.	*Description.*
74	Consolidation of Holdings (under Bombay Prevention of Fragmentation and Consolidation of Holdings Act, 1947).
75	Survey of Inam villages (for introduction of Record of Rights.)
77-A	Settlement of unsettled villages.

Scheme No. 74

The officer in charge is the Assistant Consolidation Officer, Surat, a Gazetted Officer (D.I.L.R.'s Cadre) appointed by the Settlement Commissioner and Director of Land Records and working under the immediate control of the Consolidation Officer, Surat. There are two such officers ; Assistant Consolidation Officer and Additional Assistant Consolidation Officer.

Their Subordinate staff consists of:—(1) 6 surveyors under 1 Nimtandar, each for assisting them in the measurement of subdivision for bringing the Record of Rights up to date and in preparing the scheme of the consolidation of Agricultural holding ; and

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LAND RECORDS

Schemes Nos. 75 & 77A.

(2) staff of one Circle Inspector, for the execution of the Schemes of Consolidation of Holdings after their confirmation by the Settlement Commissioner and Director of Land Records or Government as the case may be.

The special staff appointed under the supervision of Survey Mamlatdar, Baroda in 1950-51 for these schemes completed the Survey and Classification work of 29 villages in the year 1950-52. The cost of survey is recoverable from the holders under Section 135 G(*b*). The preparation of Record of Rights is completed by the Regular staff of the Talatis under the control of Revenue Department.

Under these schemes, a special party under the supervision of the Survey Mamlatdar, Surat has been appointed for the verification of boundary and partial surveys of the former Dharampur State villages where scientific settlement on Bombay lines was not introduced. The survey operations for four unsurveyed villages of Bansda Taluka and one unsurveyed Inam village in the former Dharampur State are also in progress.

SALES TAX DEPARTMENT

SALES TAX

The Sales Tax has now become the most important source of revenue to the State, as it contributes to the exchequer more than any other head of revenue, and in 1953-54 it yielded 15 crores of rupees and formed 28.45 per cent of the tax revenue of the State.

A general sales tax was first introduced in 1946 by a Governor's Act, which in the course of time underwent various amendments by the legislature. The Act that now governs the levy of sales tax is the Bombay Sales Tax Act (III of 1953) as amended by the Bombay Sales Tax Laws (Amendment) Act, 1957 (XVI of 1957).

Under section 5 of the Act dealers whose turnover either of all sales or of all purchases in a year exceeds Rs. 25,000 are liable to pay the tax. Dealers who import goods from outside the State and dealers who manufacture or process any goods have to pay the tax if their turnover of sales or of purchases exceeds Rs. 10,000 a year, provided the value of the goods imported, or manufactured or processed respectively, exceeds Rs, 2,500.

System of Tax

The system of tax as embodied in the Act is briefly as follows :—

There are three classes of tax, a "sales tax," a "general" sales tax, " and a "purchase tax." The "purchase tax" is, however, not a separate tax and is only intended to seal off a loophole for evasion of either of the other two taxes.

In effect, therefore, there is only a two point tax system, namely, a tax generally levied at the first stage of sale (sales tax) and a tax levied generally at the last stage of sale (general sales tax).

A dealer registered under the Central Sales Tax Act, 1956, who is not liable to pay tax under Section 5 of the Bombay Sales Tax Act, 1953 is nevertheless liable to pay tax under Section 5-A of the Bombay Sales Tax Act, 1953 on his sales of any goods in respect of the purchases of which he has furnished a declaration under sub-section (4) of section 8 of the Central Sales Tax Act, 1956 or on the sales of any goods in the manufacture of which such goods have been used.

Exempted Goods.

No tax is levied on goods specified in schedule A, containing 42 entries. These entries contain :—

(*i*) goods required mostly by agriculturists for cultivation, *e.g.*, agricultural implements worked or operated exclusively by human or animal agency of the following kinds : chaff-cutters, clod crushers, harrows, iron and leather mhots, iron ploughs, and plough points, pick-axes, rahats, shovels, sickles, spades and wooden seed drills (entry 1) ; cattle, sheep and goats (5) ; cattle-feeds including fodder and other concentrates but excluding cotton seed (6); fertilizers (17) ; and manures including oil cakes (32) ;

(*ii*) necessaries of the poorer sections of the community e g., betel leaves (2) ; bread (3) ; butter-milk and curds (4); cereals and pulses in all forms (7)* ; chillies ; chilly powder, tamarind and turmeric, whole or powdered (9)* ; eggs (15) ; firewood and charcoal (18) ; fish (19)*; flour including atta, maida, suji, and bran (20)* ; flowers (21) ; food and non-alcoholic drinks consumed at a hotel, restaurant, refreshment room, eating house or other place where such food and drinks are served (except when the cost of food and drinks consumed at one time by one person exceeds one rupee) (22) ; fresh fruits (23) ; fresh vegetables and edible tubers (24) ; glass bangles sold at a rate not exceeding two annas each (24)A ; Ghongadis, Kambalis or Kambal woven on handlooms exclusively out of hand spun woollen yarn and sold at a rate not exceeding Rs. 12/- each. (25) ; gur (26) ; Kerosene (28) ; kum-kum (30) ; *mangalsutra* with a black glass beads sold at a rate not exceeding Rs. 5 each (31) ; meat (33)@ ; milk, whole or separated (34) ; salt (37) ; slates and slate pencils ; chalk sticks and crayons ; foot-rules, exercise and drawing books and lead pencils ; and mathematical and drawing instrument boxes used by primary and Secondary school students (38) ; text books, books for supplementary reading and school atlases sanctioned by the State Government, Director of Education for the State, the Educational

* Except when sold in sealed containers,

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SALES TAX

Inspectors of Divisions or the Secondary School Certificate Examination Board approved by the Municipal Schools Committee (41) ; and water, other than aerated and mineral waters (42) ;

(*iii*) implements or raw materials of cottage industries and products of cottage industries, *e.g.* charkha and other implements used in the production of handspun yarn or hand-woven cloth as may be specified by the State Government by notification in the official Gazette (8) ; cloth woven in hand-looms sold at a rate not exceeding Rs. 2 per yard (10); clothes and other articles of Khaddar (11)* ; cotton yarn and cotton thread (13) ; edible oils manufactured in ghanis by human or animal agency (14) ; handmade paper (27)* ; khaddar (29)* Palm products—(1) when sold by a producer recognised for this purpose by the Collector of Sales Tax, on the recommendation of All India Khadi and Village Industries Board, set up under Government of India, Ministry of Commerce and Industries. (2) When sold by other dealer where such products have been purchased from a producer recognised by the Collector of Sales Tax in this behalf.

(*iv*) sources of power, *e.g.*, coal gas (when sold by a gas supply company to a local authority for consumption by such local authority for the purpose of street lighting) (12) ; electrical energy (16) ; motor spirit (as defined) (35) ;

(*v*) periodical journals published at intervals not exceeding one month (36);

(*vi*) stamp paper sold by vendors duly authorised under the provisions of the Indian Stamp Act, 1899 (39) ; and

(*vii*) Sugar-cane (40).

Goods Subject only to one class of tax

Schedule B lists 79 specific entries and entry 80 "all goods other than those specified from time to time in Schedule A and in the preceding entries." The first 8 of these entries composed of certain raw materials of industry, *viz*., raw cotton (whether ginned or unginned) including cotton waste. (1) cotton seeds (2) ; artificial silk yarn (3) ; hides and skins (4) ; oil-seeds (5) ; raw silk yarn (6) ; raw wool, wool tops and woollen yarn (other than knitting yarn) (7) ; and staple fibre and staple fibre yarn (8) ; and entries 9 to 18, which specify those goods out of the goods declared essential by Parliament under the Essential Goods (Declaration and Regulaion of Tax on Sale or Purchase) Act, 1952) which are not specified in Schedule A to the Act, are subject only to the general sales tax and *not* to the sales tax. On the other hand, entries 19 to 22, *viz.*, betelnuts (19) ; text-books and

* When sold by dealers reconized for the purpose — by the collector of Sales Tax,

periodical journals except such text-books and journals as are declared tax-free under entries 36 and 41 of Schedule A, and other than account books, diaries, calendars, and books containing space exceeding eight pages for being written up (not being exercise books) (20) ; coal (21) ; and safety matches (excluding matches used as fire-works) (22) ; are subject only to the sales tax and *not* to the general sales tax.

General Sales Tax

The rate of the general sales tax is only one-fourth per cent, in the case of bullion and specie (23) ; and one per cent in the case of entries 1 and 2, *i. e.*, raw cotton and cotton seeds, and only three pies in the rupee in the case of entries 3 to 8 and entry 24 [articles made of gold and silver (of fineness not less than 75 per cent) not containing any precious stones, synthetic or artificial precious stones, or pearls, real, artificial or cultured]. In all other cases it is six pies in the rupee.

Graded Sales Tax.

The sales tax, however, is graded from one-fourth per cent in the case of bullion and specie (23) and articles made of gold and silver, etc., (24) to three pies in the rupee in the case of entries 19 to 22 and entry 80. On several items, which may be said to form middle-class requirements, the rate is six pies in the rupee and on several other entries, which may be classed as "luxuries" it is twelve pies in the rupee. A sales tax of fifteen pies in the rupee is imposed on goods mentioned in entry 79 [textile fabrics of any kind including saris, dhotis, sheets, chaddars, blankets and other similar articles [except (i) cloth woven on handlooms, (ii) coarse and medium cotton cloth woven in mills or on power-looms, and (iii) tracing cloth] sold at a rate not less than Rs. 3 per yard.]

*Certain articles like photographic and other cameras and enlargers, lenses, paper, films and plates required for use therewith, X-ray apparatus and equipment and lifts whether operated by electricity or Hydrolic power, have been added to the list of luxury goods and made subject to Sales Tax at the rate of 12 pies in the rupee.

Scheme of the Act.

The scheme of the Act is such that the taxes leviable under it do not offend against Article 286 of the Constitution, which makes inter-State trade free, or hamper exports from the State to markets outside India. Suitable provisions have been made both in the Act and in the Rule framed under it to ensure that neither the Sales tax nor the general sales tax has to be paid more than once on the same article even when it is manufactured or processed. Wholesale dealers, intermediaries between wholesalers and retailers, or commission agents will not generally pay any of these taxes and in cases where they have to pay, provision exists for arranging refund of these taxes to them. In cases where dealers carry on processing or manufacture of goods for sale, it has been provided in the Rules that the sales tax paid on the purchase of

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SALES TAX

Organisation of Administration

goods used as raw materials, processing materials, fuel, lubricants, containers or packing materials shall be set off from the sales tax payable on the sale of the manufactured or processed goods.

For the purpose of the administration of the Sales Tax Act in the Surat District, two Sales Tax Officers have been appointed for Surat Office. One Sales Tax Officer is in charge of the city office and the other is in charge of the City and District Office. The Sales Tax Officer Surat City I Surat has 8 Sales Tax Inspectors under him. While the Sales Tax Officers Surat City Dn. II and District Surat has 7 Sales Tax Inspectors under him. The head-quarters of these Inspectors is at Surat.

The Sales Tax Officers exercise the powers delegated to them under the Bombay Sales Tax Act and Rules for the general administration of the Act in their charge. They register and grant licences to the dealers who are liable for registration and who are entitled to hold a licence under the provisions of the Act and are invested with powers to assess them. They receive periodical returns from the dealers, who are registered, showing the turnover during the period and tax payable by them and they verify the returns, pass orders of assessment and take steps for the recovery of the tax assessed. They are primarily responsible for the general administration of the office. One Sales Tax Officer has also been posted at Surat for Enforcement work. He detects cases of evasion of tax.

The office next above the Sales Tax Officers, Surat is the Assistant Collector of Sales Tax (Adm.) Central Dn. Range II Surat who has his headquarters at Surat. The Sales Tax Officers seek whenever necessary clarification and advise from Assistant Collector in the matter relating to the Administration of the Act. Appeals against the orders of the Sales Tax Officer lie to the Assistant Collector of Sales Tax (Appeals) Range II Central Dn. Surat from the Assistant Collector of Sales Tax (Appeals) Range II Central Dn. Surat to the Additional Collector of Sales Tax, who has his head office at Ahmedabad. The Additional Collector is under the Bombay Sales Tax Act an authority equivalent to the Collector of Sales Tax and appeals against the orders of Additional Collectors and Collector of Sales Tax would lie before the Sales Tax Tribunal. There is also provision for revision of orders passed by the Sales Tax Officers. The Assistant Collectors of Sales Tax, can of his own motion revise any order passed by any Sales Tax Officer under his jurisdiction. Similarly the Additional Collector of Sales Tax or Collector of Sales Tax as the case may be can revise any order passed by the Assistant Collector of Sales Tax or Sales Tax Officer.

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SALES TAX

Statistics of Collection

STATEMENT SHOWING THE SALES TAX RECEIPTS AND COLLECTION CHARGES IN RESPECT OF SURAT DISTRICT

Year.	Sales Tax collected.	Collection charges.	Proportion of collection charges to amount collected.
1946-47	4,02,505	40,215	9.99
1947-48	15,59,479	74,045	4.74
1948-49	18,62,959	55,859	2.99
1949-50	36,59,230	80,855	2.20
1950-51	58,40,510	99,236	1.69
1951-52	48,51,752	1,01,240	2.08
1952-53	42,34,989	1,13,955	2.69
1953-54	46,42,956	1,80,139	3.87
1954-55	71,73,640	2,09,578	2.92
1955-56	78,40,121	1,81,161	2.31
1956-57	92,82,451	1,99,200	2.14

THE REGISTRATION DEPARTMENT.

REGISTRATION DEPARTMENT.

The Indian Registration Act was enacted to prevent execution of fraudulent and forged documents and thus save the illiterate public from possible exploitation by unscrupulous *sawkars* and greedy landlords. Accordingly, the Act has mainly provided for compulsory registration of all documents affecting immovable property of value exceeding Rs. 100. Other documents affecting immovable property of value below Rs. 100 (and their number is limited) and documents of adoptions and wills have been made optionally registrable thereunder. As a rule, fees are levied for registration, but as an encouragement to the co-operative movement, the State Government have exempted from payment of fees documents relating to co-operative credit societies, land mortgage banks, urban banks (up to the value of Rs. 2,000) and housing societies (up to the value of Rs.5,000). Similarly, awards under the Bombay Agricultural Debtor's Relief Act,(XVIII of 1947 are also registered free. Marriages under the Parsi Marriages and Divorces Act (III of 1936), Bombay Registration of Marriage Act, 1953 (Act V of 1954) and the Special Marriages Act, 1954 (Act XLIII of 1955) are also registered.

Registry Offices

There are (in August 1957) 13 sub-registries in Surat district *viz*.. (1) Surat (2) Bulsar (3) Chikhali (4) Gandevi (5) Pardi (6) Navasri (7) Kamrej (8) Olpad (9) Mangrol (10) Vyara (11) Bardoli (12) Mandvi and (13) Mahuwa. In Surat there are two joint Sub-Registrars. Joint Sub-Registrar No. 1 usualy works as headquarter Sub-Registrar. All offices of sub-registrars in the district are generally housed in Government buildings. The Sub-Registrars at Bulsar, Bardoli, Vyara, Chikhali and Kamrej pay periodical visits to Dharampur, Valod, Songadh, Bansda and Palsana respectively. Some Sub-Registrars in the district work as ex-officio Mahalkaris and conduct rent suits under section 86 and 87 of the Land Revenue Code.

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REGISTRATION

District Registrar.

The Collector of Surat district is also ex-officio District Registrar. The District Registrar has powers of supervision over all the district registration staff. The Sub-Registrars are appointed by the Inspector General of Registration of the state, but *karkuns* and peons are appointed by the District Registrar. The District Registrar has powers to make appointments of sub-registrars in temporary vacancies. The District Registrar carries out the instructions of the Inspector General and if he has any suggestions for the improvement of the registration system he forwards them to the Inspector General. He visits the sub-registry offices and attends to the disposal of routine matters with the help of the Personal Assistant to the Collector and the head-quarters sub-registrar (*i. e*., Joint Sub-Registrar Surat No. 1). He hears appeals and applications preferred to him under sections 72 and 73 of Indian Registration Act (XVI of 1908) against refusals to register by the sub-registrars. Under sections 25 and 34 of the same Act, he is empowered to condone delays in presentation of documents and appearance of executants provided the delay does not exceed four months, and to direct the documents concerned to be registered on payment of a fine not exceeding ten times the proper registration fee. He is competent to order refund in case of surcharge and to grant remission in safe custody fee in suitable cases. Sealed wills or codicils may be deposited with him under section 43 of the Indian Registration Act.

Sub-Registrars

There are 14 Sub-Registrars who are subordinate to the District Registrar. The Sub-Registrar's chief function is to register documents presented for registration. Before accepting a document for registration he has to satisfy himself that stamps of the value prescribed under the Stamp Act are affixed to it and also levy the necessary registration fee. He keeps a record of such registered documents and notifies wherever necessary the facts of registration to the revenue and the city survey officers for mutation and change of names in the Record of Rights and property registers maintained by them. Certified copies from preserved records of registered documents are also issued on request from the public in writing. Every Sub-Registrar is an ex-officio Registrar under the Parsee Marriages Act, and the Bombay Registration of Marriages Act. The powers of solemnizing and registering marriages under the Special Marriage Act, 1954 are vested in the Headquarters Sub-Registrar (*i. e*. the Joint Sub-Registrar Surat No. 1 only).

From the year 1952 the Headquarters Sub-Registrar Surat, assists the Collector in matters relating to stamping, adjudication of proper duty on the documents and refunds if any, *i. e*., matters falling under Chapters IV and V of the Indian Stamp Act. Three Sub-Registries, *viz*., those at Surat, Navsari and Bulsar work under the photo copying system. Others work under hand-copying system.

Inspector of Registration.

The work of inspection is done by the Inspector of Registration, Surat Division, Surat, the Prant Officers, and the District Re-

REGISTRATION

gistrar. The inspection memoranda drawn up by the officers are scrutinised by the Inspector General of Registration. The Inspector of Registration is directly subordinate to the Inspector General of Registration and does not exercise any administrative control over the registration offices. The Inspector of Registration has to report to the District Registrar when the former inspects the sub-registries of the district. The Inspector of Registration is a touring officer with his head quarters at Surat. His duty is mainly confined to the inspection of the technical work of the registration offices including the Central Record Room at the headquarters and the record rooms of the taluka sub-registrars, so that those records which are in danger of being destroyed may be recopied and authenticated according to law. He also examines the various books, registers, indexes, accounts and other records in the sub-registries once a year and sends one copy of his inspection memo to the District Registrar and another to the Inspector General of Registration simultaneously forwarding a copy to the Sub-Registrar concerned. The Inspector General of Registration on receiving such memo, directs the Sub-Registrar concerned through the District Registrar to carry out such of the instructions proposed by the Inspector of Registration as are approved by him (*i. e.* the Inspector General).

Statistics

The average annual income of the Surat Registration District was Rs. 1,31,218 and the average annual expenditure Rs. 49,297 (based on the figures of the triennium 1954, 1955 and 1956). During the triennium referred to, in all 9,038 documents were registered in the district, composed of 8,484 documents falling under compulsory registration and of the aggregate value of Rs. 2.35,94,737/- ; 142 documents falling under optional registration of the aggregate value of Rs. 460,882 ; 148 documents affecting movable properties and of aggregate value of Rs. 2,20,247 and wills 264.

The Bombay Registration of Marriages Act, 1953 came in force from 15th January, 1955, and 3,066 marriages were registered in year 1955, 1,063 marriages in 1956, and 1,181 marriages till 30th June, 1957 in Surat city alone.

69 marriages were solemnized in 1954 under the Special Marriages Act (III of 1872). 7 marriages were registered and 28 marriages solemnized in 1955. In 1956 4 marriages were registered and 12 marriages solemnized.

The number of marriages registered under the Parsee Marriages Act, 1936, 77 were in 1954 ; 105 in 1955 and 90 in 1956.

THE STAMP DEPARTMENT

STAMPS

organisation

The Superintendent of Stamps, is the authority who controls the supply and sale of State Stamps in the State, while in the Surat District, the Collector of Surat, as the administrative

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Revenue and Finance.

STAMPS

head, holds general charge of the stamp Department. There is no officer in the district specially in charge of stamps. The work is done by the Stamps Head Karkun under the supervision of the Treasury Officer, Surat. The Treasury Officer, Surat has charge of the Local Depot at Surat, and is responsible for the maintenance of the stock of stamps, their distribution to branch depots and their sale to the public. Powers to grant refund of the value of unused, spoilt and obsolete stamps under Chapter V of the Indian Stamps Act, which were delegated to him as Hazur Deputy Collector, Surat, have been withdrawn from him after separation of the Treasury Cadre from Revenue Department, owing to the abolition of the post of Hazur Deputy Collector and they now vest in the Prant Officers upto any amount and Mamlatdars or Mahalkaris upto Rs. 50/-. A branch depot is located at every taluka or mahal headquarters and it is in charge of the sub-treasury officer, *i. e.*, the Mamlatdar or Mahalkari.

To suit public convenience, stamps are sold not only at the local depot and the branch depots, but also at various other centres by vendors authorised by Government. There ware 31 licenced stamp-vendors in the district.

Income

The following table gives the total income realised from stamp duty in Surat District during the years 1954-55, 1955-56 and 1956-57 and the amounts paid to licenced vendors during those years :—

	1954-55 Rs.	1955-56 Rs.	1956-57 Rs.
Total income relized from stamp duty			
Judicial Stamps :— ...	5,16,790-13-0	5,56,197- 6-0	5,22,816-13-0
Non-Judicial Stamps...	8,31,629- 3-0	9,48,228-13-0	11,38,657-11-0
Discount paid to stamp vendors :—			
Judicial Stamps ...	3,018-8-8	3,005- 9-9	10,446- 8-9
Non-Judicial Stamps...	12,535-4-8	14,007- 0-6	9,543 6-9

THE MOTOR VEHICLES DEPARTMENT

MOTOR VEHICLES

Motor vehicles Act II XLV of 1958

The Motor Vehicles Department deals with the administration of the Motor Vehicles Act (Amendment Act 1956—Act of 1956) and the Bombay Motor Vehicles Tax Act II. Under the first Act all motor vehicles have to be registered ; all drivers have to take out a licence which is given only on their passing a prescribed test of competence ; the hours of work of drivers of transport vehicles are restricted ; and third party insurance of all vehicles plying in public places has to be affected. It gives power to the State Governments to subject vehicles to strict mechanical tests and to control the number of vehicles to be licensed for public hire, specifying their routes and also the freight rates. Fees are leviable for registration and issue of licences and permits.

STATE TRANSPORT

There is a State Transport Authority for each State and Regional Transport Authorities have been set up for convenient regions of a State. The State Transport Authority co-ordinates the activities of the regional transport authorities.

State Transport Authority.

The Regional Transport Authority controls the motor transport in the region and deals with the issue of permits to different categories of transport vehicles according to the policy laid down by the State Transport Authority and the State Government from time to time. It also performs such duties as grant of authorisations to drive public service vehicles and conductors licences, taking departmental action against those permit holders who contravence any condition of the permit, etc., and prescribing policy in certain important matters relating to motor transport in the region.

Regional Transport Authority

The Regional Transport Authority consists of four official and eight non-official members nominated by Government under sub-section (1) of section 44 of the Motor Vehicles Act.

Regional Transport Officer

The Regional Transport Officer functions as the Secretary and Executive Officer of the authority. In his capacity as Regional Transport Officer he is the authority for licensing drivers and registering vehicles and also for prosecuting in cases of offences committed under the Motor Vehicles Act. Acting under the authority of the Regional Transport Authority, he is responsible for all the duties connected with the issue and counter-signature of authorisations to drive public service vehicles and conductors' licences and with the grant, revocation, suspension and cancellation of permits for public carriers, private carriers, stage carriages and taxi cabs.

Other Staff

Two Assistant Regional Transport Officers and one Supervisor assists the Regional Transport Officer at headquarters. Six Motor Vehicles Inspectors look after the work of registration inspection of motor vehicles, testing of motor drivers and conductors, checking of motor vehicles and detecting offences under the Motor Vehicles Act. They are assisted by nine Assistant Motor Vehicle Inspectors in these duties. One Sub-Police Prosecutor looks after the prosecution work and conducts cases launched in courts of law.

This Department has liaison with the Police Department. The Police Department carries out periodical checks of motor vehicles and detects offences under the Motor Vehicles Act. It also attends to references from the Motor Vehicles Department regarding verification of character of applicants for public service vehicle authorisations, conductors' licences, taxi cab permits, etc. It also helps in the verification of non-use of vehicles and recoveries of arrears of taxes and in specifying particular places for bus stops, etc.

The District Magistrate comes into relation with this department in connection with imposition of restrictions on road transport, fixation of speed limits, and location of motor stands.

Motor Vehicles Tax Act

Under the Bombay Motor Vehicles Tax Act, taxes are levied on all motor vehicles, except those designed and used *solely for carrying out agricultural operations on farms and* farm lands. The taxes are based on the types of vehicles (e. g. motor cycles, tricycles, goods vehicles, passenger vehicles, etc.), and their laden or unladen weight. The Act has removed all municipal and State tolls on motor vehicles. The Rules made under this Act lay down that when a vehicle is to be registered within the State, the registering authority (i. e., the Regional Transport Officer) shall verify the particulars furnished in the application for registration (e. g., the make of the vehicle, its capacity, etc.), and determine the rate of the tax for which the vehicle is liable. Every registered owner who wants to use or keep for use any vehicle in the State has to pay the tax determined, stating the limits within which he intends to use the vehicles, i. e., whether only within the limits of a particular municipality or cantonment or throughout the State. A token for the payment of the tax will be issued by the registering authority and this has to be attached to and carried on the vehicle at all times when the vehicle is in use in a public place. A fresh declaration has to be made annually, or every time the tax has to be paid (i. e., quarterly, half-yearly or annually). The registering authority before issuing the token in respect of the payment of the tax has to satisfy it self that every declaration is complete in all respects and the proper amount of tax has been paid.

It may be mentioned here that with a view to facilitating the convenience of the motoring public and for the purposes of smooth administration of the Motor Vehicles Department, an office of the Assistant Regional Transport Officer has been estalished at Surat with effect from June 1st, 1957 with one Assistant Regional Transport Officer, two Motor Vehicles Inspectors and one Assistant Motor Vehicles Inspector.

CHAPTER 16-DEVELOPMENTAL DEPARTMENTS

THE AGRICULTURE DEPARTMENT

THE WORK CARRIED ON BY THE Agriculture Department may be grouped under three sections viz., (1) Demonstration and extension (2) Research and Education (3) Agricultural Engineering and (4) Dairy Development. Sections of Livestock (cattle), Poultry farming and Sheep Breeding have been recently transferred to the Veterinary Department from 1st July 1957.

At the head of the department in the State is the Director of Agriculture, and there are two Joint Directors, one for Engineering and the other for Extension. Three Deputy Directors, one in charge of seed multiplication and extension, the second in charge of manures, fertilizers and rural developnment and the third in charge of research and education co-ordinate the work of their respective sections in the State as whole. One Deputy Director for crop research concerns himself with the technical side of crop research.

The officer of the Department in charge of agricultural extension work in the District is the District Agriculture Officer. The District Agriculture Officer is responsible to the Director of Agriculture, Gujarat State Ahmedabad. There are six Agriculture Officers under him including the Assistant District Agriculture Officer and the Special Agriculture Officer, in charge, Paddy Pilot Scheme, Chikhali, all members of the sub-ordinate Agriculture services, who supervise the work of the different Agriculture Divisions of the District. The Special Agriculture Officer, in charge, Paddy Pilot Scheme, organises the work of the Japanese paddy method in an intensive area covering 115 villages of Chikhali Block as per a scheme sanctioned by the Government up to 31st December, 1957.

In addition there are nine Agriculture Officers working in the National Extension Service Block at Navasari, Palsana, Chikhali, Bansda; Community Development Blocks at Songad and Special Multi-purpose Project, Dharampur. These Agriculture Officers work under the technical guidance of the District Agriculture Officer. There are 47 Agriculture Assistants who look after Agricultural Extension work in the talukas of this district excluding National Extension Service and Community Development Blocks where the agricultural extension work is looked after by Gram Sevaks.

The District Agriculture Officer is responsible for the following:-

(a) Organising the work of Agriculture Demonstration Centres and holding field demonstration in important agricultural practices related to agriculture, horticulture, livestock etc.

(*b*) Organisation of crop protection services.

(*c*) Supervision of crop cutting experiments.

(*d*) Inspection of offices and depots in the district.

(*e*) Submission of season and crop reports.

(*f*) Working of Grow More Food schemes, i.e. procurement and distribution of improved seeds and co-ordinating agricultural extension work connected with livestock, mechanical cultivation, soil conservation and lift irrigation, either directly or indirectly, the last through the District Committees on various agricultural matters, of which he is a member.

Demonstration and Extension

Thirty-nine demonstration centres have been opened on cultivators' farms. The owner-cultivators adopt the agricultural improvements advocated by the department under the supervision of the Agriculture Assistant. Field demonstration of standing crops are held during every season.

Extension work is carried out by the Agriculture Assistant. The taluka is divided into five circles each in charge of an Assistant. In each taluka there is a depot wherein improved seed, manures etc. are stocked for sale. There are fifteen co-operative societies collaborating with the department in the work of manure distribution.

The work of multiplication, distribution and "Agmarking" of 2087 Surati cotton is incharge of the Cotton Superintendent, Surat, who works under the control of Director of Agriculture, Ahmedabad. The Surati cotton tract comprises the cotton growing areas of Surat district part of Broach district lying the south of the Narbada river, and the Navapur and Akkalkuwa talukas of West Khandesh. He is assisted by four Agricultural Officers and ten Agriculture Assistants for the execution of the work. In addition, seasonal *Kamgars* are appointed for inspection of fields and supervision of ginning and pressing work so as to maintain the purity of the type.

Research

There are five research farms in the district, viz.

(*i*) *Agricultural Research Station, Surat*:—

The Agricultural Research Station at Surat was started in 1896 and is one of the oldest research stations in the State and has an area of 165 acres. The main item of work is botanical and agronomical research on cotton and Jowar, specially for the black cotton soil area of the South Gujarat tract. In addition, work on improvement on Indo-American Cottons obtained as a result of work under the scheme for interspecific hybridisation in cottons is also in progress at Surat under a scheme financed by the Indian Central Cotton Committee, Bombay.

(*ii*) *Sugarcane Research Station, Vyara*:—

The farm was started in 1934 with the object of carrying on agronomic work on sugarcane and paddy. It has an area of 29 acres.

(*iii*) *Agricultural Research and Demonstration Farms under the Kakrapara Project at Bardoli and*

(*iv*) *At Kholwad, Taluka Kamrej*:—

The object of the above two stations is to find out the manurial and the water requirements of the main crops of the tract and to introduce new crops for growing under irrigation and to demonstrate the best way of utilising irrigation water. Both these farms were opened from the year 1957-58. The area of the Bardoli farm is 39 acres and that of the Kholwad farm 47 acres.

(*v*) *Fruit Research Station Gandevi*:—

The object of this research station is to carry out research work on the fruit crops of the district and supply plants of important fruit crops. The farm has an area of 26 acres.

Livestock Cattle Breeding

Livestock (*Cattle*).—The cattle improvement work is in charge of the District Agricultural Officer, who looks to all activities pertaining to cattle improvement. Premium bulls are located in villages to improve the village scrub stock by the grading system. Pure-breed animals are tattooed and registered in the herd book. As part of post war reconstruction schemes supplementary cattle breeding centres have been started in Bardoli, Palsana, Navsari, Mandvi and Mahuva talukas. Every year cattle shows and rallies are held in the district so that the villages may understand the importance of the pure breed animal and may be encouraged to adopt systematic breeding.

A key village scheme covering eleven villages is also running since 1954-55. Under this scheme an intensive Animal Husbandry and Cattle Breeding programme has been undertaken.

The key village scheme is further assisted by an artificial insemination centre at Kadod. This is in charge of a Veterinary Officer who is assisted by two Stockmen and four Agriculture Assistants. The work of this centre is supervised by the Livestock Inspector, Surat, who works under the control of the District Agricultural Officer, Surat.

There is no breed of cattle for which this district is noted. The work is carried out on Kankrej cattle and Surati buffalows. The breed of Surti goat found in this district is famous for its high milk yield and economic maintenance.

CHAPTER 16.

Developmental Departments.

AGRICULTURE

Dairy Development.—There is one Agriculture Officer for the Dairy Development scheme for the whole Northern Division with headquarters at Surat, who works under the direct control of the Dairy Development Officer, of the State.

The necessary advice and help on matters pertaining to Dairying are given by this section. As a result of activity of this section one District Co-operative Milk Producers Union has been established to purchase, process and sell milk and milk products, to supply cattle feeds and other requirements to members and members of associated societies, with an authorised capital of Rs. 1,00,000 and a subscribed capital of Rs. 14,000. the union is composed of 11 member societies comprising over 4000 individual producers covering about 100 villages. The union and two other co-operative societies associated with the union handle 20,000 lbs. of milk per day sold to customers in Surat city.

Other Officers

Other Officers.—The Head-quarters of the following officers whose jurisdiction extends over the whole State are also located at Surat:—

1. Cotton Development Officer, Gujarat State, Surat.
2. Cotton Botanist, Gujarat State, Surat.

Cotton Development

The Cotton Development Officer, Gujarat State, Surat, is in charge of (1) the scheme for Planned Production of Cotton in the State and (2) the scheme for Planned Extension of Superior Long Staple Indo-American Cottons in Goradu and Light Soil areas of Gujarat. He is assisted by three Assistant Cotton Development Officers and one Cotton Superintendent in Gujarat Agricultural Service Class II and 11 Agriculture Officers and Agriculture Assistants in Subordinate Service for the whole State a number of Cotton Botanist, is in charge of Cotton Tobacco Research in the State.

DISTRICT AGRICULTURE OFFICER (CLASS II)*

		Working directly under.
1.	Agriculture Officer—Agriculture Assistants (General).	District Agriculture Officer, Surat.
2.	Cotton Superintendent, South Gujarat, Surat, Bombay Agricultural Service Class II—Cotton Officers—Agriculture Assistants.	Deputy Director of Agricultural, Baroda.
3.	Assistant Cotton Development Officer (Bombay Agricultural Service Class II) Agriculture Officer, Agriculture Assistants.	Cotton Development Officer, Gujarat State, Surat.
4.	(i) Agriculture Officer, In Charge, Agricultural Research Station, Surat, Agriculture Assistants. (ii) Agriculture Officer, In Charge, Inter-specific Hyridization Scheme, Surat Agriculture Assistants.	Cotton Botanist, Gujarat State, Surat.
	(iii) Agriculture Officer, In Charge, Agricultural Research and Demonstration station under Kakrapar Project at Bardoli, Agriculture Assistants. (iv) Agriculture Officer, In Charge, Agricultural Research and Demonstration station under Kakrapar Project, at Kholwad, Agriculture Assistants.	Technical control under Deputy Director of Agriculture (Crop Research) and Administrative control under Cotton Botanist, Gujarat State, Surat.
5	Agriculture Officer, In Charge, Agricultural Research Station, Vyara for sugarcane—Agriculture Assistants.	Sugarcane Specialist to Government, Gujarat State,
6.	Agriculture Officer, In Charge, Dairy Farming Scheme, North Division, Surat.	Dairy Development Officer, Gujarat State,
7.	Agriculture Officer, In Charge, Fruit Research Station, Gandevi.	Horticulturist to Government, Gujarat State,

*The District Agriculture staff also carries out any special work directed by the following officers working at Head-quarters :—

(1) Statistician (2) Plant Pathologist (3) Agricultural Entemologist (4) Protessor of Agronamy (5) Economic Botanist (Horticulturcist (7) Professor of Agricultural Economics (8) Agricultural Chemist (9) Agricultural Engineer (10) Mechanical Cultivation Engineer (11) Oil Seed Specialist (12) Deputy Director (Crop Research) (13) Livestock Expert (14) Cotton Development Officer, Gujart State, Surat (15) Cotton Botanist, Gujarat State, Surat (16) Soil Physicst (17) Sugarcane Specialist to Gujarat Government.

CHAPTER 16.

Developmental Departments

CIVIL VETERINARY DEPARTMENT

VETERINARY DEPARTMENT

The main functions of the Veterinary Department are treatment of sick animals, control of cattle epidemics and castrations. The departmenı also conducts the work of control and destruction of ticks. It also advises people in the hygenic methods of animal managenent and participates in various cattle fairs and shows held at various places in State by opening veterinary stalls.

The veterinary activities in Surat -and Broach districts are controlled by the Divisional Veterinary Officer, Surat Division, Surat, who is incharge of two districts, Surat and Broach. He is directly responsible and subordinate to the Director of Agriculture and Animal Husbandry Gujarat State,

In Surat district, there were 19 veterinary hospitals and dispensaries located at Surat, Bulsar, Bardoli, Chikhai, Eru, Olpad, Pardi, Mandvi, Valod, Bansda, Dharampur, Navsari, Gandevi, Mahuva, Mangrol, Songadh, Vyara, Palsana and Orna.

The Veterinary Officers in charge of the veterinary hospitals and dispensaries are officers in the State Veterinary Service. There is also a mobile staff of stockmen attached to veterinary hospitals, dispensaries, for carrying out vaccinations, castrations and treatment work in rural areas. There are three to four fixed centres in the jurisdiction of each Veterinary dispensary, which are periodically visited by the Veterinary Officers or stockmen for treating local animals, castration etc.

In 1956-57, 35,853 animals were treated for contagious and non-contagious diseases and 3,097 castrations were performed at the veterinary hospitals and dispensaries in the Broach and Surat Districts. The Veterinary staff also treated 19,685 animals and performed 1,238 castrations in the villages while on tour. The following are the statistics of outbreaks of main contagious cattle diseases and the inoculations and vaccinations carried out during 1956-57.

Name of the disease.	No. of out breaks reported.	No. of inoculations and vaccinations carried out.
1. Surra ...	42	cases treated.
2. Rinderpest ...	121	17,266
3. Haemorrhagic Sep--ticaemia. ...	241	47,612
4. Black-Quarter ...	41	2,677
5. Foot & Mouth. Disease.	92	cases treated
6. Ranikhet Disease ...	18	3,334
7. Dengue ...	2	cases treated
8. Anthrax ...	5	1
9. Fowlpox ...	4	98
10. Rabies ...	4	cases treated.
11. Other diseases ...	4	—

Inspection of animals tendered for slaughter is carried out at the slaughter house at Broach with a view to preserving animals useful for milk, breeding, etc. During the year 1956-57, a total number of 1,609 animals were inspected by the local veterinary officer out of which, 15 animals were rejected being useful for agricultural, breeding and milk purposes.

During 1956-57, 23,986 animals were sprayed with gammexene powder for the same purpose.

Veterinary Section.—The chief activities of the Veterinary section are treatment of animals diseases, control of epidemics, and castration of bovines. This section is also in charge of the control and destruction of animal ectoparasites by the use of the dipping tanks and sprays. It advises people in the hygenic methods of animal management and holds shows and fairs. It is under the control of the Divisional Veterinary Officer, Surat DIvision, Surat. He is directly responsible and subordinate to the Director and Animal Husbandry and Agriculture.

NATIONAL EXTENSION AND COMMUNITY DEVELOPMENT BLOCKS

National Extension and Community Development Blocks

There were three community development blocks and one national extension service block under the control of this division.

To render every possible assistance in connection with the first aid to the ailing animals, two first aid centres at Chaswad and Dharoli in charge of stockmen were continued by the community development block authorities and after closure of the block period the same centres are continued by this department.

The national extension service block in Rajpipla taluka started functioning from the 1st week of February, 1957, and two stockmen are working at the centres of this block. The national extension service block, Navasari was also continued during the period and the community development block at Songadh is also continued by the Government.

The work done by the stockmen deputed under community development block and national extension service is exhibited as under :—

Name of community development blocks and first aid veterinary centres.	No. of villages visited	No. of animals vaccinated	No. of animals treated.	Gammexene cases treated.	Castration done.
Valia Chaswad-Dharoli	621	3,732	2,370	1,075	142
Community development block Songadh Jamkhadi.	149	596	484	886	26
National extension service, *Navsari* Vesma and Maroli.	224	1,503	1,181	439	74

CHAPTER 16.

Developmental Departments.

FOREST Organisation.

THE FOREST DEPARTMENT

The Head of the Forest Department of the State is the Chief Conservator of Forests, whose headquarters is at Baroda. The whole State is divided into three territorial circles for administrative purposes, and at the head of each Circle is a Conservator of Forests. With the abolition of the post of Conservatoer of Forests, Research and Working Plan Circle, Working Plan work is entrusted to the Divisional Forest Officers, The following special posts are also provided for the whole State. The post of Siliviculturist-cum- Forest Utilisation Officer, at Baroda is created for the State.

The territorial Conservators have Divisional Forest Officers under them to look after the administration of Division or the Sub-Division of a Circle. These Divisional Forest Officers belong to the Bombay Forest Service, Class I. Each division is divided in to small executive parts called "Rangers" and each range is managed by Range Forest Officer under the direct control of the Divisional Forest Officer. The Range Forest Officer is a non-gazetted subordinate of Class III, who is usually trained at the Forest Colleges at Dehra Dun, Coimbatore and Dharwar. Each range is sub-divided into "Rounds" and each round is managed by a Round Officer (or Forester), who is usually trained at the Forest School in the State. Finally, each round is sub-divided into "Beats" and each beat is managed by a Beat Guard (or Forest Guard). The posts of Depot Guards are also created for checking forest produce in transit under section 41 of Indian Forest Act.

The Surat district has got two forest divisions viz., Surat and Vyara, managed by the Divisional Forest Officers, Surat and Vyara with their headquarters at Bulsar and Vyara respectively and are included in the circle.

The Surat and Vyara divisions are divided into five ranges and six ranges respectively as under, managed by the Range Forest Officers with their headquarters as shown below:—

Name of Division.		*Name of Range.*	*Headquarters*
Surat	...	Dharampur.	Dharampur.
		Kaprada.	Dharampur.
		Nanaponda.	Pardi.
		Bansda.	Bansda.
		Unai.	Unai.
Vyara	...	Vyara.	Vyara.
		Vajpur.	Songadh.
		Sadadvel.	Songadh.
		Tapty.	Songadh.
		Nessu.	Navapur.
		Mandvi.	Mandvi.

Under these eleven Range Forest Officers of Surat and Vyara Divisions there are 23 and 29 Round Officers (or Foresters) and 86 and 101 Beat Guards (or Forest Guards) respectively.

Surat and Vyara forest divisions consist mainly of merged State areas and some reserved forests of former Bombay State as shown against each division.

Surat Division : Former Dharampur, Bansda and Baroda States (Unai Range) and Reserved Forests in Pardi, Bulsar and Chikhali Talukas.

Vyara Division : Former Baroda and Sachin States and Reserved Forests in Mandvi Taluka.

The Revenue and Forest Departments are closely connected at a number of points. Afforestation and disafforestation are practically functions of Revenue Department owing to the fact that the public rights in land 'proposed for afforesation, have to be settled by that department. Working plans for the management and development of forests are prepared solely by the Forest Department, but in so far as the prescriptions of a Working Plan affect local suppply and the rights and privileges of the inhabitants of the tracts, the approval of the Collector has to be obtained before it is submitted to Government by the Chief Conservator for sanction.

The Divisional Forest Officer is directly responsible for the protection, exploitation and regeneration of the forests according to sanctioned working plans and other orders. He conducts sales, enters into contracts, supplies material to departments and the public, realises revenue and controls expenditure. He deals finally with forest offence cases, under Indian Forest Act 1927. As the forests of former Dharampur and Bansda States have not been finally constituted as Reserved or Protected Forests under Indian Forest Act, the forest offences in these areas are disposed off by the Divisional Forest Officer, under section 43 Land Revenue Code in the capacity of the Deputy Collector as per the powers delegated by the Collector, Surat. In short he is responsible for forest administration and management in all matters relating to technical forest operations, and at the same time he is an assistant to the Collector and is subject to his orders in questions where forestry practice affects popular interests.

The Divisional Forest Officer is designated as Game Wardon under the Wild Life Preservation Act, 1951 and he is authorised to issue Small Game Licences under the above act; and he is responsible for the management of this act.

CHAPTER 16. Developmental Department. FOREST

The Assistant Conservator or Sub-Divisional Forest Officer assists the Divisional Forest Officer in the work of inspection and supervision. He has the same powers as the Divisional Forest Officer except in matters of accounts. No such post exists at present in the Surat and Vyara Divisions.

The Range Forest Officer is in executive charge of his range. He is responsible for carrying out, with the help of his round officers and beat guards, and according to the orders of the Divisional Forest Officer, all work in his charge, such as the making reservation, girdling and felling of trees; the transport of timber, fuel, etc. to the sale depot; sowing, planting, tending and other silvicultural operations; construction of roads, buildings, and wells; protection of forests and investigation of forest offences; supervision or removal of forest produce by purchasers and by holders of rights and privileges; and issue of passes and permits. The Range Forest Officer is designated as Assistant Game Warden and he has to see that no illicit shooting is done in forests or in the closed areas.

The Foresters' duties include protecttion of forests; detection and investigation of offences; and issue of transit and other passes; collection of revenue from permits and compensation in offences; reservation of standards (i.e. the number and kind of trees prescribed for preservation and the manner of cutting etc.). In coupes given out to contractors for cutting; inspection and protection of forests; and guidance and supervision of forest guards.

The Forest Guards' functions are to patrol and protect all forests in his beat; repair and maintain forest boundary marks; execute Silvicultural works, viz., sowing, planting and creeper-cutting; and detect forest offences.

Classification of Forests: Working Plans.

Under the Indian Forest Act (XVI of 1927) forests are divided into two main classes, "Reserved" and "Protected". Before forests are classified, they have to be subjected to regular settlement by a forest settlement officer, who enquires into the existence of all public and private rights. In the case of reserved forests, the existing rights are either settled, transferred or commuted. In the case of protected, the rights are simply recorded and regulated. The classification of forests as stated above is not done in the former Dharampur and Bansda States of Surat Division. The work of forest settlement in former Dharampur areas is in progress and these forests are being constituted as Reserved or protected forests by the Forest Settlement Officer, Ankleshwer. The Forest of Bulsar Round of Nanaponda Range and Unai Range of former Baroda State have been constituted as Reserved Forests. All the Forests of Vyara Division have been classified as Reserved forest under the Indian Forest Act

(XVI of 1927). The total forest area in charge of Forest Department in the district is as under :—

Name of Division	Name of Range.	Forest areas Unclassed. Sq. Mile.	Forest areas classed as R. or P.F.S. Sq. Mile.	Total Sq. Miles.
Surat ...	Dharampur	103.1	—	509.93
	Kaprada	142.2	—	
	Nanaponda (excluding Bulsar Round)	101.2	—	
	Bulsar Round	4.0	71.63 R.F. *1.3 P.F.	
	Bansada	86.5		
		437.00	72.93	
Vyara ...	Vyara	...	67.7 R.F.	488 0
	Sadavel	...	62.2 „	
	Tapty	...	79.6 „	
	Vajpur	...	90.6 „	
	Nessu	...	106.3 „	
	Mandvi	8.7	72.9 „	
		8.7	479.3	

P.F.=Protected Forests.

R.F=Reserved Forests.

*An area of 1.3 Sq. Miles of Protected Forest and 460 acres of Reserved Forests of Halmodi village from Dangs Division have been transferred to Surat Division and is included in Unai Range. All Reserved Forests in charge of Forest Department are managed according to the prescription of "Working Plans". A Working Plan is a document which lays down the detail of scientific managements of a forest for a period of years. Before Working Plan is drawn up, survey is made of the growing stock, at times by actual examination and an analysis is made of the stems of standing trees to determine the rate of growth of the principal species with special reference to the soil and the climatic conditions of each locality. On the basis of the data thus collected, plans are drawn up for felling, regeneration, silvicultural treatment and protection of forests, with provision for due exercise of the rights and privileges of the people, including grazing of cattle. The preparation of working plans is done by the Divisional Forest Officer, Working Plans, Nasik and Dhulia Circles, Nasik. The forests of former Dharampur State are being worked as per the provisional Five Years Scheme, drawn by Shri R. B. Kale. The forest of former Bansda State are being worked as per programme drawn by the Divisional Forest Officer, Working Plans, Nasik and Dhulia Circles, Nasik. The regular Working Plan for the former Dharampur and Bansda State Forests will be prepared by the Divisional Forest Officer, Working Plans after the completion of settlement work.

CHAPTER 16.

Developmental Departments.
FOREST
Functions of the Department.

The main functions of the Forest Department may be classified as under : (1) regenertion and maintenance; (2) systems of management; (3) exploitation.

(1) *Regeneration and Maintenance.*

As an area is cut and tree growth removed it is regenerated with a fresh crop. This is the principal duty of a forest officer. Great care and precaution is required against damages by man, animals and plants, and against adverse climatic influences and other inanimate agencies. Damage by man is caused by (1) lighting of fires; (2) encroachments; (3) faulty exploitation methods and (4) misuse of forest rights and privileges. Though occasionally forest fires may originate from natural causes, in the vast majority of cases they are due to human action, either within or without the forest. The most frequent cause is carelessness or recklessness and sometimes illicit *shikar* but occasionally there is incendiarism. To prevent damage by fire, the whole-hearted support and co-operation of the public is required. This co-opeartion is secured through the authority and influence of the village headmen. Precautionary measures like fire-tracing and early burning are also taken by the department in good time against accidental fires. Clearing of shrubby growth along roads and paths is also done to avert any fire spreading in the forest. Rigid patrolling and vigilant watch against unauthorised felling and removal of forest produce by the villagers are resorted to. Offenders in respect of unauthorised grazing and protection from cattle are dealt with severely under the Forest Act and other laws.

SURAT FOREST DIVISION

(2) *System of Management.*

The silvicultural systems of management in force are :—

(i) *Selection-cum-improvement*:— Under this system trees of specified girth and all deformed, decayed trees are marked for fellings. The first category of trees are marked for selection and second under improvement felling. Regeneration is carried out by rab planting in open blanks. The forest of Unai Range of former Baroda State are worked under the above system under Combined Working Plan for the Vyara Division and Vankal Tappa and Nanchhal Forests written by Shri R.I. Patel, and the Forest of Bansda State are worked under the same system as per the Provisional Working Scheme drawn up by Shri P. M. Tagarse. The Forests of former Dharampur State are also worked under the above system with a provision for clear felling of 100 acres in each coupe to remove the existing bad quality of forest and to replace the same with regular teak plantation. As per the Provisional Five years Scheme drawn by Shri R. B. Kala, elanks and rabs are planted with teak stumps.

(ii) *Clear fellings* :—The Forest of Bulsar Round are worked under Bulsar-Chikhali-Working Plan. Under this system the area due for exploitation is clearfelled and natural regeneration is supplemented with artifical regeneration.

In both the above system cleanings are done in the area exploited for 3 years and thinnings are done usually in the 11th year as per the Working Plan Schme.

Vyara Forest Division .—The Silvicultural system of management in force are as per combined Working Plan of Vyara Division.

(i) The forest of this Division are divided in the following working circles prescribed by the combined workings of Vyara Division and Vankal Tappa and Nanchhal forests, prepared by Shri R. I. Patel, M.SC., B.A. (HONS.) A.I.F.C.

(1) Main Working Circle.

(2) Plantation Working Circle.

(3) Umrath Working Circle.

(4) Bamboo Working Circle.

(5) Grazing Working Circle.

The main working circle is worked under selection-cum-improvement system. The trees to be felled are marked with coaltar band.

(ii) Every year 4 coupes are being clear-felled (2 in Vyara and 2 in Tapty). The area suitable for plantation purposes is artificially plainted and the rest is brought under natural regeneration.

(iii) Umrath area is wholly saltish with no prescription for working along the Arabian Sea. Parts of this area are being developed by the Khar Land Development Department.

(iv) Bamboo Circle is worked by rotation of the area containing bamboo to meet with the local demands for house building and cottage industries carried out by the local people residing there.

(v) Grazing: (a) The total area excepting the area brought under plantation (upto five year old plantation) is open to grazing ;

(b) Fellings are followed by weedings in the first two years after working in the regenerated area.

(c) Cultural operations are carried out in the rab plantation at 5th and 11th year after the plantation by carrying out cleaning. The letter one is a little remmunerative. In addition two heavy thinnings are carried out in 22nd and 35th year in oder to allow the development of the retained stems to the maximum.

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Revised Working Plan of Mandvi:—The system adopted is selection-cum-improvement over greater part of the area, in that 1/3 part of each coupe is clear felled for artificial regeneration. A minimunm of eight acres is prescribed for regeneration in each coupe. Other operations after exploitation are similar to those described above.

Bulsar and Chikhali Working Plan:—This area is transferred from Surat Division for convenient control and is worked under two system one clear felling and the second thinning.

General for both the Divisions.;—With a view to demonstrating to the public how the barren acres could be successfully clothed with tree species, afforestation schemes under Second Five Year Plan were taken up in Bulsar, Pardi and Chorasi Talukas in both the divisions.

Grant of blank areas in the forests of former Bansda State are on Eksali-cultivation at present.

Free supply of seedlings important species is made to the public and other departments for Vanamahotsava.

Exploitation

(3) *Exploitatian.*—Forest products are divided into main classes, major and minor. Major forest products comprise mainly wood i.e. timber and fuel. All coupes due for working are advertised and sold annually either by tenders or by public auction. Penalties for breach of the contract terms are stipulated in the agreement and are inflicted upon the defaulters. Minor Forest Products in Surat and Vyara Divisions of Surat district are as under :—

(1) Rosha grass, (2) Kadhaya-gum (3) Miscellaneous gum (4) Chilar-bark (5) Mahowra-flowers and fruits (6) Manvel and Kastel bamboos (7) Mehendi leaves (8) Apta-Timoruni-leaves (9) Honey and Wax.

They are formed out on an annual basis. Normally exploitation is done by consumers and purchasers. The annual income from minor forest produce and major forest produce year wise in Surat and Vyara divisions of Surat district are as under:—

Name of Division	Year	Major Forest Produce.	Minor Forest Produce.	Total
Surat ...	1954-55	8,39,977-0-0	89,614-0-0	9,29,591-0-0
	1955-56	10,82,540-0-0	1,16,431-0-0	11,98,971-0-0
	1956-57	17,22,861-0-0	1,57,096-0-0	18,89,957-0-0
Vyara ...	1954-55	17,67,427-8-0	10,87,536-1-3	28,54,963-9-3
	1955-56	18,26,147-9-9	1,10,776-11-3	19,36,924-5-0
	1956-57	28,33,247-7-1	10,390-10-0	29,33,638-8-1

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Relation with people

(A) The existing privileges in the forest areas in charge of Forest Department in the district are as under :—

I—SURAT FOREST DIVISION

(i) *Former Dharampur State:—*

(1) Free grazing for village cattle.

(2) Collection and removal of deadwood by forest villagers for bonafide private use.

(3) Collection and removal of litter for bonafide private use.

(4) Scheduled rates for bamboo etc. and timber for domestic usages.

(5) Cultivation in any blank areas in the Forest irrespective of damage to the Forest i. e. shifting cultivation.

(6) Collection of Minor Forest Produce and sale of the same to any contractors.

(7) Removal of Manvel bamboos and Kastal bamboos on permits at concessional rates for their own use.

(8) Free grants of timber at the time of calamity like fire etc.

(9) Collection of grass from Forest areas for bonafide use.

(ii) *Former Bansda State :—*

(1) Cattle grazing is permitted in reseved forests except in felled coupes, which are less than five years old.

(2) Karvi fibres and thatching material allowed to be removed, free for bonafide agricultural use.

(3) Dead fallen leaves are allowed to be removed free for rabbing.

(4) Firewood from dead trees is allowed to be removed free on headloads only for bonafide use.

(5) Dhamoda axles and Dhaman Dhors are allowed to be brought free for bonafide agricultural use only.

(6) Teak leaves for thatching agricultural and living huts allowed free.

(7) Use of Apta and Tim purni and Pal leaves is allowed.

(8) After the grass is removed by the State or by contractors the remaining grass (Karad) is allowed to be removed free on headloads for use or for sale.

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(9) Grazing of sheep and goats is allowed in reserved forests in monsoon only on payment of fees @ two per head. This privilage is for the local villagers and shephards only.

(iii) In Unai Range part of former Baroda State:—

Concessions as regards timber and bamboos are regulated under Chhaparia Kat Niyam (Free grant rules) sanctioned under the Council Order No. 15, 20th September, 1933. This provides for,

(*a*) Free grant of hutting timber and bamboos worth Rs. 50/- for building new huts except for the cases of destruction by fire or flood. This grant is made available only once in five years.

(*b*) A free grant of hutting timber and bamboo worth Rs. 25/- for repairing huts and for agricultural implements when required but once a year only. Under these rules the permits are issued by a Forest Officer not below the rank of a Ranger.

(*c*) All Forest Villagers may collect from the Forest without pass or permission, reeds, fallen leaves, Chaj grass, Karvi and dry fallen deadwood for that by headloads according to their domestic requirements and for their own household purpose only.

(iv) Bulsar Round of Nanaponda ***Range*****:—**

(*a*) Balitha : Right of way along the cart-track running through Survey Nos. 52, 54 and 57.
The following privilages are allowed :—

(1) Grazing for horned cattle in three fourth of forest under the Kanara grazing rules.

(2) Free collection of wild fruits.

(3) The use of 19 acres and 35 gunthas of Udwada forests and of 10 acres and 14 gunthas of Bulsar forests, which has been given to the Parsis on payment of Rs. 15-1-10 per year.

(4) access to the temple in Parnara Fort.

(5) Use of water in the coupe 18.

II.—VYARA FOREST DIVISION.

(i) In Songadh and Vyara Talukas of former Baroda State.

(*a*) A free grant of hutting timber and bamboos worth Rs. 50/- for building new houses.

(*b*) A free grant of hutting timber and bamboos worth Rs. 25/- for repairing huts and agricultural implements when required but once a year only will be made available to local forest villages.

(*c*) All forest villagers may collect from the forest without pass or permission, reeds, fallen leaves, Chhag grass, Karvi and dry fallen deadwood for fuel by headload according to their domestic requirements for their household purposes only.

(*d*) Local workers may remove by headloads, bamboos for the whole year on payment of fees of Rs. 12/- per year.

Note.--Advantage of privilege (*a*) and (*b*) is given to the local forest villagers (villages named below) including agriculturists and Khatedars having not more than 30 bighas of land in their name.

Taluka	Villages
1. Songadh Taluka (Vyara Division)	... (1) All forest villages in Songadh Taluka except for Songadh proper.
	(2) Singhpur, Vaghnara, Bhausrotwadi, Motikherwan, Dumda, Kadkhadi, Vagda, Nani Kherwan, Pipalkuwa.
2. Vyara Taluka (Vyara Division).	... All villages having reserved forest in Vyara Taluka.

B. In the administration of forest rights and privileges and in the work of forest protection and exploitation, the officials of the Forest Department come into direct contact with the people. A direct link between the people and the department has been established by the appointment of a Forest and Grazing Committee by the District Development Board. This Board deals with problems connected with forest policy, re-afforestation, tree planting, allotment of grazing lands etc.

Vana Mahotsava.

The Government of India inaugurated in 1950 an annual function called "*Vana Mahotsava*" to be celebrated in the first week of July every year. The object is to encourge the planting of as many trees as possible in suitable places. In choosing trees for planting, preference is given to quick growing ones of economic value (mostly fruit trees, shade trees, ornamental trees and fodder trees). The Distrct Development Board is expected to attend to the after-care of the young plants, which is to be entrusted as far as possible to local villagers. Village Production Committees, which are committees set up for encouraging growth of more food crops, are to be responsible

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for the successful obesrevance of *Vana Mahotsava* in the respective villages. Cultivators desirous of planting trees in the Forest Department areas or on roadside lands belonging to the Public Works Department are given sanads enabling them to take fruits of the trees planted by them.

Number of trees planted in this district during 1954 to 1958 are as under :—

Year.	*Surat Division.*	*Vyara Division.*
1954-55	24,217	3,006
1955-56	19,469	4,204
1956-57	19,310	6,420
1957-58	22,785	10,572

In order to meet the demand of the public and the seedlings required for the *Vana Mahotsava* plantation work in the area, the Government have provided a Scheme for raising seedlings under the permanent (Wet) nurseries Schemes under Second Five Year Plan.

Forest Roads.

363 miles 7 furlongs of forest roads as under exists in the Surat Disrict.

Division.	*Range.*	*F.W.Rds.* *M. Fs.*	*Bridle Rd.* *M. Fs.*	*Metal Rd.* *F. Fs.*
Surat ...	Unai ...	10-0	—	6-0
	Dharampur ...	27-4	—	—
	Kaprada ...	23-2	—	—
	Nanaponda ...	16-0	—	—
		76-6	—	6-0
Vyara ...	Vyara ...	3-1	23-4	—
	Sadadvel ...	3-4	22-4	—
	Tapti ...	29-0	12-4	—
	Vajpur ...	17-0	10-0	—
	Nessu ...	70-6	38-4	—
	Mandvi ...	50-6	—	—
		174-1	107-0	—
	Grand Total ...	250-7	113-0	6-0

The above forest roads are annually repaired and maintained by this department. The year-wise expenditure on the

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maintenance (except Sara Valotha Road) of above roads is as under :—

Year.	Expenditure.	
	Surat Division.	Vyara Division.
1954-55	21,447- 8-6	16,919
1955-56	3,117-13-0	5,514
1956-57	7,809-13-0	3,369

1st Five Year Plan

No works have been undertaken in Surat Division during this plan.

2nd Five Year Plan.

The following schemes are included for execution in this district under Second Five Year Plan Schemes.

S. No. Name of Scheme.	Physical target.
1. *Afforestation of Arid Blank Areas.*	
(*a*) Afforestation Scheme for Pardi, Bulsar and Chorasi Talukas.	It is proposed to carry out afforestation work in an area, of 2,297 acres during the 2nd Five Year Plan period. During the year 1956-57 plantation over an area of 375 acres has been completed. While in the year 1957-58 afforestation work in an area of 466 has been carried out.
2. *Planting of Agave hedges*	It is proposed to raise agave hedges on the length of 365 miles during the 2nd Five Year Plan period. In 1956-57 Agave hedges were raised over the length of 6 miles.
3. *Scheme for Matchwood Plantation.*	It is proposed to raise matchwood plantation over an area of 800 acres during the 2nd Five Year Plan period. During the year 1956-57 matchwood plantation has been raised over an area of 200 acres.
4. *Establishment of Wet nurseries.*	11 nurseries are proposed to be raised during the Second Five Year Plan. In 1956-57, 9 nurseries have been established.

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5. *Intensification of checking of Forest Produce in transit.*	One checking Depot at umberpada is proposed to be opened in the 2nd Five Year Plan and the same has been established in the year 1956-57.

S. No.	*Name of the Scheme.*	*Total area to be undertaken in*	
		Surat Division.	*Vyara Division.*
		A. G.	A. G.
(1)	Soil Conservation and Afforestation Scheme for Bulsar, Pardi and Chorasi Talukas.	1,381-18	890- 4
(2)	Establishment of Wet nurseries. ...	30-00	10-00
(3)	Planting of Agave hedges. ...	184 miles	181 miles
(4)	Matchwood Plantation Schemes ...	400-00	400-00

Buildings

The housing for subordinate staff is satisfactory in the former Baroda State forest areas and also in the Reserved Forest areas of the divisions. In the remaining areas housing arrangement for forest staff is not satisfactory and steps are being taken to provide suitable quarters on the allotment of funds.

The position of the Rest Houses and Inspection huts in the forests is as under :—

Division	*No. of Rest Houses,*	*No. of Inspection huts.*
Surat	...	3
Vyara	2	...

Wild Life Census :—No Wild Life census work has been taken up in this district. Following Wild Animals are found in negligible number in both the forest divisions.

Birds.—Storks, Egret or herons, Cormorants, Local Ducks, Parrots, Bulbul, Green Peageon, Grey Peageon, Wood Pecker, Partridges, Pea-fawls, quils.

Animals.—Tiger, Panther, Spotted dear, Sambar, Blue-bull, Wild dogs, Monkey.

The Wild Life Protection Act is effective in multiplaying their numbers in this district.

THE CO-OPERATIVE DEPARTMENT.

CO-OPERATIVE

The Co-operative Department in the Surat District is in the administrative charge of the Assistant Registrar, Co-operative Societies, Surat, who is a Gazetted Officer in Class II of the State Co-operative Service. Over him is the Divisional Deputy Registrar, Co-operative Societies, Bombay State who has jurisdiction over five districts *viz*., Bombay (City and Suburban), Ratnagiri, Kolaba, Thana and Surat. Administratively, the Assistant Registrar is responsible for the supervision and guidance of the various types of societies in his charge. Many of the powers of the Registrar of Co-operative Societies under the Bombay Co-operative Societies Act (VII of 1925) and the Rules under it have been delegated to him. The Assistant Registrar, is assisted in his duties by two District Co-operative Officers, who are responsible for organisation of societies, development of the movement, supervision over societies in rural and semi-rural areas, arrangement for crop finance etc. The District Co-operative Officers are also appointed to work as nominees of the Department on certain types of Co-operative Institutions. Although their jurisdiction extends over the whole district, the co-ordination of the departmental activities at the district level is done by the Assistant Registrar so that there may be no duplication between the Assistant Registrar and the District Co-operative Officers. There is also one Assistant Distritct Co-operative Officer who assists the Assistant Registrar in the general administrative work in the district, and in particular in regard to organisation of agricultural credit and multipurpose societies consumers stores and other simple types of primary institutions. There are also three more Assistant District Co-operative Officer for Surat District one for housing societies, another for lift irrigation and farming societies, and the third for sugar co-operatives.

Supervision Staff

The supervision staff serves as the link in the administrative machinery. Their main responsibility is confined to detailed supervision over the working of agricultural and multi-purpose societies affiliated to the supervising unions in the district. They are expected to supervise every society in their charge at least once in every three months. They are in addition required to assist societies in the preparation of normal credit statements and assets registers and also in making arrangements for provision of crop finance. With the introduction of National Extension Service and Community Development Projects in the district, however, the posts of supervisors have gradually been abolished and replaced by Gram Sevaks who are expected to look to supervision work in addition to their normal duties in the National Extension Service and Community Development Projects blocks. Selection of Gram Sevaks is made from amongst the personnel of the Agricultural Co-operative and Revenue Departments by a board consisting of the Collector of the District. The Assistant Registrar and the District Agricultural Officer. They are under

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the administrative control and direction of the project officer for the district. In addition to Gram Sevaks there are also Assistant District Co-operative Officers for National Extension Service for each block. In Surat District there are four such Assistant District Co-operative Officers posted at Palsana, Navasari, Songadh and Chikhli.

The skeleton of the supervisory staff in the Surat District now consists of 8 supervisors who are appointed by the Divisional Deputy Registrar from among selected men who have undergone training and passed the test prescribed or otherwise are certified to be eligible by the Registrar. The Supervisors are under the control and direction of the District Supervision Committee, Surat, which functions under the direct control of the Provincial Board of Supervision. This committee is constituted of :

(1) The Assistant Registrar, Co-operative Societies, Surat.

(2) The Chairman of the Financing Agency or his nominee.

(3) The Chairman of the District Co-operative Board ;

(4) One representative of the supervising unions in the district and

(5) One representative of the agricultural non-credit societies in the district.

The District Co-operative Officer, Surat, is the secretary of the committee. The committee recommends disciplinary action, where necessary, against the supervisors ; scrutinises and checks their programme and diaries ; and reviews the working of supervising unions and supervisors. It receives a grant from the Provincial Board of Supervision to meet its expenses.

Supervising Unions

A supervising union is formed for every taluka (or in cases where there are no sufficient number of societies in one taluka, for two talukas) by societies registered in the area. The following classes of registered societies are eligible for membership of the union :

(1) all agricultural credit societies ;

(2) all agricultural non-credit societies, except those which are affiliated to a union of their own ; and

(3) all non-agricultural credit societies except those which are affiliated to a union of their own or whose operations are not predominantly non-agricultural.

The main function of the supervising unions are :

(1) to advise, guide, assist, rectify and control its constituent societies by efficient and regular supervision ; and

(2) to provide a means of assessing the credit of each of its constituent societies and to make recommendations in this behalf of the financing agencies.

The Supervisor for the area acts as the secretary of the union.

There are 13 supervising unions in the Surat district.

In areas where there are no supervising unions or supervision staff, the work of supervision is performed by a supervisor, who has been appointed by Government to deal with special problems outside the normal activities of the Department.

District Co-operative Board.

Education and training in co-operation and propaganda for the spread of the co-operative movement are carried on by the District Co-operative Board under the guidance of the Bombay State Co-operative Union. The membership of the Board is of two classes *viz*., (1) ordinary, consisting of all co-operative societies in the District and (2) Associate, consisting of individuals. A nominee of the financing bank. (the Central Bank), the Assistant Registrar and the Executive Officer of the Bombay State Co-operative Union are ex-officio membrs of the general body of the Board. There is a board of management of the Board, consisting of :

(1) one representative per each taluka of socteies affiliated to the supervising unions ;

(2) two representatives of societies not affiliated to the unions in the district.

(3) two representatives of federations or societies whose area of operation is not less than a district.

(4) one representative of the central financing agency.

(5) one nominee of the Bombay State Co-operative Union.

(6) one representative of the Divisional Co-operative Board, for Gujarat ;

(7) two representatives from the individual members, one for 50 or less and one for excess over 50 ; and

(8) one nominee of the Co-operative Department.

The Board of management has also the right to co-operate a co-operator of outstanding merit or experience from the district. The District Co-operative Board is affiliated as a subscribing member to the Divisional Co-operative Board for Gujarat, which has its head-quarters at Ahmedabad, and also to the Bombay State Co-operative Union.

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Audit.

Section 22 of the Bombay Co-operative Societies Act provides for statutory audit of every society once a year either by the Registrar or by some person authorised by him. The audit staff in Surat-District works under the control of the Assistant Registrar, Co-operative Societies, Surat. It can be classified under four categories *viz.*, (1) Special Auditor, (2) Auditors, (3) Sub-Auditors and (4) Certified (Professional) Auditors.

The Special Auditor is an officer belonging to the Co-operative Service, Class II. This officer is stationed at Surat and has jurisdiction over the District of Surat. He audits the accounts of :

(1) Central Bank ;

(2) purchase and sale unions and sale societies ;

(3) the District Industrial Association ;

(4) C. and D. Class urban banks having working capital exceeding Rs. 50,000 ;

(5) housing societies indebted to Government ; and

(6) societies in liquidation belonging to the class of societies in his charge.

He also carries out a test audit of 3% of the societies audited by professional auditors. In addition to a staff of sub-auditors and clerks, he has one Auditor under him, who is allotted independent units of societies.

There are five Auditors (on 30th June, 1957) who work independently of the, Special Auditor. They audit the following types of societies :

(1) Multi-purpose societies and their shops ;

(2) Taluka Development Boards ;

(3) Weavers societies ;

(4) Industrial societies ;

(5) District Co-operative Board ;

(6) Supervising unions ;

(7) Agricultural, non-credit societies, like crop protection fencing and joint farming societies ; and

(8) Other societies.

The Sub-auditors, seven in number audit all agricultural credit societies (except multipurpose societies and societies running fair price shops and/or distribution centres with a turnover exceeding Rs. 50,000) .

In the case of the following types of societies in the district, certified (professional auditors) are appointed to carry out the statutory audit of the following institutions :

(1) consumers societies with a turnover of Rs. 50,000 and over ;

(2) urban banks and societies classed as A or B with a working capital of Rs. 50,000 and over ;

(3) housing societies having no outstandings against them on account of Government loan ; and

(4) any other society certified by the Registrar.

Other Staff

The other staff in the district are (1) Special Recovery Officers, (2) Hon. Organisers and (3) Arbitrators.

Under the Bombay Co-operative Societies Act, money recoverable as arbitration awards or liquidation orders and certain other dues of co-operative institutions are recovered through the Collector according to the Law in force for the recovery of arrears of land revenue. When the normal staff of the Revenue Department is not in a position to cope up with the work, Special Recovery Officers are deputed from the Revenue Department to the Co-operative Department to expedite the work. At Surat there is one such officer who is appointed to make recoveries of the dues of Surat Weavers Co-operative Society Ltd., Surat.

The honorary organisers are non-officials who give assistance in the matter of organisation of different types of societies. They are appointed on functional basis as well as on territorial basis. The jurisdiction of the honorary organiser appointed on territorial basis extends to one or more talukas or even the whole district. Those who are appointed to organise a particular class or classes of societies are termed as honorary organisers on educational basis. At present there are 20 honorary organisers appointed on territorial basis and seven on functional basis in Surat District.

Under the Bombay Co-operative Societies Act, co-operative societies or members thereof may refer their disputes to the Assistant Registrar for decision either by himself or by his nominee. Every year a list of persons who may act as Registrar's nominee for deciding disputes is published, and the Assistant Registrar sends cases of disputes to such nominees. In Surat District there are 20 Registrars nominees.

Educational Institutions

The Gujarat State Co-operative Union which is recognised as the sole agency for imparting co-operative training to officials and non-officials throughout the state, has established a Regional Co-operative School at Surat.

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Paddy cultivation Scheme

Recently the Surat district has been brought under the paddy cultivation scheme sponsored by Government in the Agriculture and Forest Department. The work is carried out by the Assistant Registrar, Paddy Cultivation Scheme, who is stationed at Chikhali and assisted by four supervisors and one clerk. The duties of the Assistant Registrar for paddy cultivation consists of organisation and establishment of societies undertaking paddy cultivation by the Japanese method and making available loans to them for this purpose.

Marketing

The Registrar of Co-operative societies is also Director of Agricultural Marketing and in this capacity he shares with the Collector of the district the responsibility for the effective enforcement of the Bombay Agricultural Produce Markets Act of 1939. The Director performs the functions of survey, organisation and constitution of regulated markets, assessment of adequate scale of licence fees, market cess, rates of commission and charges of other market functionaries, approval of bye-laws and annual budgets of market committee and technical guidance as regards the manner in which the accounts of the market committees shall be maintained. The administrative control of the market committees and the enforcement of statutory provisions and the rules governing the regulation of markets are, however, vested in the Collector who exercises these powers in consultation with the Director of Agricultural Marketing.

The Director of Agricultural Marketing is assisted by a separate marketing staff consisting of the Chief Marketing Officer who is also now designated as Joint Registrar, Co-operative Societies and one Assistant Marketing Officer at headquarters. In addition, there are Divisional Assistant Marketing Officers at Ahmedabad, Nasik, Poona, Rajkot, Nagpur, Amraoti and Parbhani, who are looking after the work of regulated markets in their respective divisions. The Chief Marketing Officer and the Joint Registrar is an officer of Class I State Service and Assistant Marketing Officer's are in Class II.

The Assistant Marketing Officers have usually 4 to 5 districts in their charge and they are provided with a staff of Marketing Inspectors whose jurisdiction extends to over one or two districts. At present there are 3 Marketing Inspectors attached to the office of the Chief Marketing Officer and Joint Registrar.

The Bombay Agricultural Produce Markets Act (XXII of 1939) aims at regulating the selling and buying of Agricultural produce and provides for the establishment of regulated markets for agricultural commodities. These markets are to be placed under the supervision of statutory market committees fully representative of growers, traders, local authorities and Government. The market committee is empowered to levy fees on the agricultural produce under regulation bought and sold by licensees

in the market areas. The Committee may also levy fees from traders, commission agents, measures, surveyors and other persons operating in the market. They also issue licences to different marketing functionaries. With the previous sanction of the Director, they can prescribe rates of maximum charges for the services of the various persons operating in the market.

In the Surat District, the provisions of Bombay Agricultural Produce Markets Act, 1939 have been made applicable to markets at Surat, Bulsar and Mahuva. In addition, steps are being taken to regulate the market at Bulsar.

Sarvodaya Centres.

The State Government have adopted a scheme known as the Sarvodaya scheme, the aim of which is to bring about all round intensive development, social, educational and economic of selected compact blocks of backward villages (from 30 to 45) in each district, through a constructive programme which was foremost in the objectives of Mahatma Gandhi. This scheme aims at development of backward areas by means of measures relating to (1) Education, (2) Agricultural development, (3) cottage industries and industries subsidiary to agriculture, (4) health, water supply and conservancy, and (5) social and cultural development including prohibition.

Two Sarvodaya centres were opened in Surat district one at Vedchi and the other at Puna consisting of 45 villages from Mandvi Taluka and 24 villages from Mahuva Taluka respectively.

The chief executive authority in the formulation and implementation of a scheme is a "Sanchalak". He is assisted by a committee consisting of non-officials known as the Sarvodaya area committee. Such committee has been established only at Vedchi. Every year a programme for the development of the area is formulated by the Sanchalak which is considered by the State Sarvodaya Committee before it is finally sanctioned by Government during the financial year 1956-57, grants totalling to Rs. 63,117 and Rs. 48,547 have been sanctioned for the Vedchi and Puna centres respectively.

Money Lending.

The Bombay Moneylenders Act, 1946 was brought into operation in Surat district from 17th November, 1947. The salient features embodied in the Act are (1) licencing of moneylenders ; (2) maintenance of accounts by moneylenders ; (3) restrictions on rates of interest.

Prior to the reorganisation of the administrative organisation of the Moneylenders' Act, the Personal Assistant to the Collector, Surat, was appointed to work as Registrar of Money-lenders for Surat District and the Mamlatdar of each Tauka was appointed to work as Assistant Registrar of Moneylenders for the Taluka.

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During the year 1955-56, there were 99 licenced money-lenders in the district, and these money-lenders advanced loans to agriculturist and other debtors in the district to the extent of Rs. 25,21,960.

The Registrar of Co-operative Societies is ex-officio Registrar General of Money-lenders. From 1st August, 1957, the Assistant Registrar of Co-operative Societies and the Deputy Registrar of Co-operative Societies were appointed to work as Assistant Registrar of Money--lenders and Registrar of Money-lenders respectively for the district. An Inspector of Money-lenders has been appointed for the district with a view to assist the Assistant Registrar of Money-lenders to keep a vigilent watch on money-lending activities in this district.

THE FOLLOWING STATEMENT DISPLEYS IN TABULAR FORM THE ORGANIZATION OF THE CO-OPERATIVE DEPARTMENT IN THE DISTRICT.

SURAT

I.—ASSISTANT REGISTRARS OF CO-OPERATIVE SOCIETIES (CLASS II).	*Working directly under.*
(1) District Co-operative Officer : (2) Additional District Co-operative Officer and Assistant District Co-operative Officers.	Assistant Registrar, Co-operative Societies.
(3) District Supervision Committee (D. C. O. Secretary).	Provincial Board of Supervision.
Supervisors (who are also secretaries of Taluka Supervising Unions).	Divisional Deputy Registrar.
(4) District Co-operative Board ...	Bombay State Co-operative Union, Bombay.
(5) Audit staff— ...	Assistant Registrars, Co-operative Societies.
(i) Special Auditor (Class II), with two Auditors and one Sub-Auditor.	
(ii) 5 Auditors at Vyara (1), Navsari (1), Surat (2) and Bulsar (1).	
(iii) 7 Sub-Auditors, and	
(iv) Certified (professional) Auditors.	
(6) Special Recovery Officer. ...	Assistant Registrar, Co-operative Societies.
(7) Honorary Organisers : 20 on teritorial basis. 7 on functional basis.	
(8) Nominees of Assistant Registrar ... (to decide disputes) (23 in number)	Cases are sent to these noiminees by Assistant Registrar.
II.—ASSISTANT MARKETING OFFICER (CLASS II).	
(1) Marketing Inspector, Surat (in charge of the district.)	Assistant Marketing Officer, Baroda.
III.—REGISTRAR OF MONEY LENDERS, SURAT.	
(Personal Assistant to the Collector, Surat).	
(1) Assistant Registrars, Co-operative Societies-*cum*-Special Assistant Registrar of Money-lenders.	Deputy Registrar, Co-operative Societies, *cum* Registrar of Money-Lenders, Ahmedabad.
SARVODAYA.	
Sanchalak (assisted by the Sarvodaya Area Committee for the area concerned).	State Sarvodaya Committee.

Department of Industrial Co-operatives and Village Industries

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INDUSTRIES CO-OPERATIVE

Organisation.

There is an Assistant Director of Cottage Industries and Assistant Registrar for Industrial Co-operatives for Surat District. Under him there is a District Officer for Forest Labourers' Societies, a District Officer for Cottage Industries and Industrial Co-operatives, Assistant Instructors for the Government Leather Works School at Navsari, Government Dyeing and Printing School at Surat, Governmernt Fibre Work School at Songadh, Government Carpentry *Cum*-Lacquer Work at Nanivahial, Government Cane and Bamboo School at Bulsar and some superintendents of the I, II, and III grades.

The members of Industrial Co-operatives as on 31st December 1957 was 117, with an aggregate share capital of Rs. 11,04,587 with reserved funds amounting to Rs. 17,05,770 and working capital coming to Rs. 45,88,374. These Co-operativesc embrace a variety of industries like forest produce, weaving, tanning, cane work, hand pounding of rice, neera and palm-gur production, oil pressing carpentry and smithy. Table No. I supplies all the necessary details regarding weavers' societies, Table No. II about forest workers' Societies, Table No. III about the handloom schemes and the loans advanced to them, Table No. IV about the sales of handloom cloth by their societies. Loans were advanced from Rs. 200 to Rs. 5,000 by way of financial assistance to industrial artisans by this department under various schemes.

Trainees in the various craft schools are paid stipends at Rs. 15 and Rs. 20 a month in the rural and urban areas respectively. Under the head of Rural Art Crafts and Industries, the Community Development Block at Songadh started (1) carpentry smithy school (2) a tailoring school for women (3) a tailoring school for men (4) a bamboo work school (5) a lac rearing training scheme (6) a poultry training centre and (7) a palm gur production training school.

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INDUSTRIAL CO-OPERATIVES

TABLE No. I

Details showing the working of the Industrial Co-operatives (including Weavers Socities) in the Surat District as on 30th June, 1957.

Total No. of industrial Co-operatives			Share Capital Rs.			No. of Members			Reserve and other funds.		
Weavers Societies	Other Industrial Societies 1	Total	Weavers Societies	Other Industrial Societies 2	Total	Weavers Societies	Other Industrial Societies 3	Total	Weavers Societies	Other Industrial Societies 4	Total.
23	85 (including 36 Forest Labourers' Societies)	108	Rs. 6,80,021	Rs. 4,24,566	Rs. 11,04,587	Rs. 5,466	11,051	16,517	Rs. 7,19,449	Rs. 9,86,321	Rs. 17,05,770

Statement (Contd.)

Government Loan Rs.			Working Capital			Sales			Profit			No. of looms owned by the members of the Weavers Societies	Remarks
Weavers Societies	Other Industrial Societies 5	Total	Weavers Societies	Other Industrial Societies 1	Total	Weavers Societies	Other Industrial Societies 2	Total	Weavers Societies	Other Industrial Societies 3	Total	4	5
Rs. 38,811	Rs. 85,316	Rs. 12,412	Rs. 19.12,751	Rs. 33,32,110	Rs. 54,44,861	Rs. 6,35,501	Rs. 39,52,873	Rs. 45,88,374	Rs. 13,909	Rs. 9,82,091	Rs. 1,12,080	3,039	...

TABLE No. II

Comperative figures indicating the general result of the working of the Forest Labourers Societies for the last three years.

Sr. No.	Particulars	1954-55	1955-56	1956-57
1	2	3	4	5
1.	No. of Societies	20	24	36
2.	No. of members	5,342	7,393	9,677
		Rs.	Rs.	Rs.
3.	Share capital	60,310	71,248	1,31,427
4.	Reserve fund	1,53,010	2,01,988	2,67,165
5.	Other funds	3,19,955	4,25,363	6,36,033
6.	Bank loan and other liabilities	2,24,718	4,18,950	3,85,498
7.	Sales effected during the year	19,01,554	34,73,670	53,37,046
8.	Stock on hand at the close of the year	3,49,246	3,36,474	3,83,342
9.	Profit	4,33,059	8,69,577	11,43,924
10.	Losses	15,334	5,459	411

The following table gives the Audit classification of the Societies.

Year	A	B	C	D	Not classified (Being new)
1954-55	4	7	2	1	6
1955-56	6	12	1	1	4
1956-57	2	10	1	1	12

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INDUSTRIAL CO-OPERATIVES

TABLE No. III

STATEMENT SHOWING THE DETAILS OF THE LOANS AND SUBSIDIES DISBURSED UND R DIFFERENT HANDLOOM SCHEMES IN SURAT DISTRICT AS ON 31ST DECEMBER 1957.

Sr. No.	Name of the Weavers Societies having production activities including District Industrial Co-operative Association.	Taluka	Loans for working capital	Loan for share capital	Loan for market ing	Conversion of throw shuttle	Auto-take up motion	Steel reeds and varnished healds	Dobbies with dibby latices	Slay with drop boxes	Wider Slay	Padal Looms	Iron-roller temple	Sample looms	Pattern making factory
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
			Rs	Rs	Rs.	Rs.	Rs	Rs.	Rs.	Rs	Rs.	Rs.	Rs.	Rs.	Rs.
1.	Surat District Industrial Co-operative Association Limited, Surat.	Chorasi	10,000 (for Pattern making)	—	16,700	—	—	—	—	—	—	—	—	200	22,000
2.	Surat Weavers Co-operative Production Society Limited, Surat.	Chorasi	—	—	—	650	—	—	—	—	—	—	—	—	—
3.	Dumas Vankar Tatha Gramodyog Society Limited, Dumas.	Chorasi	8,000	390	—	—	350	—	—	90	—	2	50	200	—
4.	Abrama Vibhag Co-operative Society, Limited, Abrama.	Navsari	10,000	1,060	—	—	2,310	600	—	—	150	3	330	—	—
5	Gandevi Weavers Co-operative Society Limited, Gandevi.	Gandevi	42,000	460	—	—	—	—	—	—	—	—	—	—	—
6.	Bansda Weavers Co-operative Society Limited, Bansada.	Bansda	—	—	—	—	840	—	60	300	250	—	120	200	—
7.	Chikhli Weavers Co-operative Society Limited, Chikhli.	Chikhli	—	—	—	—	—	—	210	—	—	2	—	—	—
			70,000	1,910	16,700	650	3,500	600	270	390	400	7	500	600	22,000

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INDUSTRIAL CO-OPERATIVES

TABLE No. IV.

DETAILS OF THE SALES OF HANDLOOM CLOTH BY THE SURAT DISTRICT INDUSTRIAL CO-OPERATIVE ASSOCIATION LTD., SURAT AND OTHER WEAVERS SOCIETIES DURING THE YEAR 1956-57, AND UPTO 31-12-1957.

Sr. No.	Name of the Society	Sales of Handloom Cloth during 1956-57	Sales of Handloom Cloth from 1-7-1957 to 31-12-1957
1	2	3	4
1.	The Surat District Industrial Co-operative Association Ltd., Surat, 10 Sales Depots.	7,56,097	4,04,513 (12 S. Ds.)
2.	Bansda Taluka Weavers Co-operative Society Ltd., Bansda.	40,520	16,150
3.	Abrar Vibhag Sahakari Mandali Ltd., Abrama.	50,814	24,944
4.	Dumas Vankar Tatha Gramodyog Sahakari Mandali Ltd. Dumas	24,068	22,557
5.	The Chikhali Taluka Weavers Co-operative Society, Ltd., Chikhali.	30,704	12,295
6.	The Gandevi Vanat Udyog Sahakari Mandali Ltd., Gandevi.	2,12,522	1,12,566
7.	Alipur Vankar Sahakari Mandali Ltd., Alipur	489	4,909
		11,15,754	5,97,934

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DEPARTMENT OF INDUSTRIES

THE DEPARTMENT OF INDUSTRIES

The work of the Department of Industries is mainly confined to the development and progress of small-scale industries in the State, as its control over the development of cottage industries was, in December, 1946, transferred to the Department of Industrial Co-operatives and Village Industrises and its control over technical education and the various schemes related to it was, in June, 1948, transferred to the Director of Technical Education.

Organisation.

The officer directly in charge of small-scale and large-scale industries in the Surat District is the Assistant Director of Industries (Class I State Service), who has his headquarters in Baroda, although his jurisdiction extends to the district of Baroda, Kaira, Panchmahals, Broach and Dangs. He works directly under the Director of Industries, Bombay State. He is also in charge of work connected with the administration of the Bombay Weights and Measures Act (XV of 1932) and the Industrial Statistics Act (XIX of 1942). Besides collecting statutory statistics under the Industrial Statistics Act, 1942, he collects industrial and commercial information on a voluntary basis. He conducts commercial and industrial surveys required by the State or the Union Government and undertakes investigation in connection with references and complaints received from Indian embassies abroad and foreign embassies in India. He also conducts investigations in connection with the Merchandise Marks Act (IV of 1889) and reports cases of improper use of names and emblems specified under the schedule to the Emblems and Names (Prevention of Improper Use of) Act, 1950, for trade, business, calling or profession etc. Purchase of stores is another subject under his jurisdiction. Under the State Aid to Industries Rules, he is empowered to sanction loans up to a limit of Rs. 1,000 in each case to applicants in his jurisdiction, subject to the condition that the total amount sanctioned by him does not exceed Rs. 5,000 in any one year. His miscellaneous duties extent to investigating into applications (made for industrial purposes) from parties in his area for land acquisition and erection of buildings and for essentiality certificates in connection with the import, export and purchase of controlled materials, such as iron and steel, cement, etc.

The Assistant Director is assisted in his work by an Industries Officer stationed at Baroda, one Senior Industries Inspector, four Junior Industries Inspectors, five Manual Assistants and a small ministerial staff.

The duties assigned to Inspectors of Weights and Measures under the Bombay Weights and Measures Rules are carried out by the Industries Inspectors. The main purpose of the Bombay Weights and Measures Act is to provide for the adoption and compulsory use of standard weights and measures in the State. No weight or measure or weighing or measuring instrument may

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be sold, delivered or used for trade, unless it has been verified or reverified in the manner prescribed by Rules made under the Act and stamped by an Inspector with a stamp of verification. Fees are fixed for the verification, stamping, etc. It is the duty of the Inspectors to carry out the verification and stamping and collect the fees.

DEPARTMENT OF INDUSTRIES

The Industries Inspectors have also duties assigned to them under the Industrial Statistics Act. This Act is applicable to all Factories registered under sections 2m (i) and 2m (ii) of the Factories Act, 1948, but the scope of the Census of Manufacturing Industries conducted under this Act is at present limited to 29 of the 63 industries classified under the Census of Manufacturing Industries Rules 1945, and to factories working with power and employing 20 or more workers. The occupiers of factories are required to submit returns in the form prescribed. The Inspectors have to ensure that the factories concerned maintain proper accounts and registers and make their returns by the due date.

THE PUBLIC WORKS DEPARTMENT.

THE PUBLIC WORKS DEPARTMENT

The Public Works Department deals with (1) Roads and Buildings ; (2) Irrigation ; (3) Electricity and (4) Public Health Subjects. All these subjects are dealt with by the respective divisional offices of the department in the Surat district where the structure of Public Works Department organisation is as follows :-

Organisation.

(1) *Roads and Buildings.*—For administrative purposes the Roads and Buildings Branch in the district is placed in charge of the Superintending Engineer, South Gujarat Circle located at Baroda. Under him there are two Divisions (Surat Division and Navsari and Dangs Division) which comprise not only the Surat district but the area of Dangs district also. The Surat Division is divided into 7 sub-divisions while the Navsari and Dangs Divisions has 5 sub-divisions working for Surat District with their headquarters as shown below :—

(1) Surat Division, Surat :—

(a) Surat City Sub-Division, Surat ; (b) Mandvi Sub-Division, Mandvi ; (c) Vyara Sub-Division, (Roads and Buildings), Vyara ; (d) Bardoli Sub-division, Bardoli ; (e) National Highway Sub-Division, Kathor ; (f) Vyara Irrigation Sub-Division, Vyara ; and (g) Minor Irrigation Works Investigation Sub-Division, Vyara.

(2) Navsari and Dangs Division, Navsari :—

(a) Navsari Sub-Division, Navsari ; (b) Bulsar Sub-Division, Bulsar ; (c) Chikhali Sub-Division, Chikhali ; (d) Khar Lands

Development Sub-Division, Navsari ; and (e) Minor Irrigation Works Investigations Sub-Division, Navsari.

(2) *Irrigation.*—Major Irrigation in the district is placed in charge of the Superintending Engineer, Tapi Construction Circle. Under him, in Surat district, there are 10 temporary Divisions mainly for executing Kakrapar and Ukai projects. The ten Divisions together have 44 Sub-Divisions under them as shown below :—

Tapi Construction Circle, Surat.

(1) Kakrapar Right Bank Canal Divisions :—

(*a*) Right Bank Main Canal Water Course Sub-Division, Kathor, ; (b) Hajira Sub-Division, Olpad ; (c) Kim Sub-Division, Kim ; (d) Mandvi Sub-Division, Mandvi ; (e) Tadkeshwar Sub-Division, Tadkeshwar ; and (f) Areth Sub-Division, Areth.

(2) South Tapi Division, Navsari.

(a) Umreth Sub-Division, Navsari ; (b) Vankaner Sub-Division, Vankaner ; (c) Siadla Sub-Division, Siadla ; and (d) Mahwa Sub-Division, Mahwa.

(3) North Ambica Division, Navsari ;—

(a) Bodwank Sub-Division, Gandevi ; (b) Astagam Sub-Division, Astagam ; (c) Jervavra Sub-Division, Jervavra ; (d) Water Course Sub-Division No. 1, Karchelia ; and (e) Water Course Sub-Division, No. 2 Amalsad.

(4) South Ambica Division, Bulsar :—

(a) Kalwada Sub-Division, Bulsar ; (b) Chikhli Irrigation Division, Chikhli ; and (d) Khergam Sub-Division, Khergam.

(5) Mechanical Division, Kakrapar ;—

(a) Communication Sub-Division, Kakrapar ; (b) Mechanical Sub-Division No. 1, Mandvi ; and (c) Mechanical Sub-Division No. 2, Kholad.

(6) Surat Canals Division, Surat :—

(a) Surat Canals Sub-Division No. 1, Surat ; (b) Surat Canals Sub-Division No. 2, Bardoli ; (c) Surat Canals Sub-Division No. 3, Kathor ; (d) Surat Canals Sub-Division No. 4, Surat ; and (e) Kakrapar Dam Sub-Division, Kakrapar.

(7) Ukai Division No. I, Surat—

(a) Ukai Sub-Division No. 1 (Laboratory), Surat ; (b) Ukai Sub-Division No. 2, Songadh ; (c) Ukai Sub-Division No. 3, Songadh ; (d) Ukai Sub-Division No. 4, (Designs), Surat ; (e) Tapi Soil Survey Sub-Division, Bardoli, and (f) Narmada Soil Survey, Broach.

(8) Ukai Division No. II, Surat—

(a) Ukai Sub-Division No. 1, Ankleshwar ; (b) Ukai Sub-Division No. 2, Kosamba ; (c) Ukai Sub-Division No. 3, Hansot ; and (d) Ukai Sub-Division No. 4, Hansot.

(9) Ukai Division No. III, Surat—

Four Sub-Divisions in this Division are still to be opened.

(10) Ukai Division No. IV, Surat :—

(a) Ukai Sub-Division No. 1, Vyara ; (b) Ukai Sub-Division No. 2, Ukai ; (c) Ukai Sub-Division No. 3, Songadh ; and (d) Ukai Sub-Division No. 4, Songadh.

While each circle is in charge of a Superintending Engineer, the Divisions are in charge of Executive Engineers and the Sub-Divisions in charge of Assistant Engineers or Deputy Engineers. The Assistant Engineers belong to Bombay Service of Engineers (B. S. E.) Class I and Deputy Engineers to Bombay Service of Engineers (B.S.E.) Class II. These Officers being in charge of Sub-Divisions are called Sub-Divisional Officers. The Sub-Divisions are divided further into sections, each in charge of an Overseer. There are about 20 overseers in each Division.

The Superintending Engineer :—

Superintending Engineer.

The Superintending Engineer is responsible for the administration and general professional control of Public Works in charge of Officers of the department within his circle. It is his duty to inspect the state of various works within his Circle and to satisfy himself that the system of management prevailing is efficient and economical. He is required to ascertain the efficiency of the Sub-ordinate Officers and petty establishments and to see and report whether the staff employed in each division is actually necessary or adequate for the management. He also examines the conditions of the surveying and mathematical instruments at the headquarters of divisions. In the case of office and petty establishments borne on divisional scales, he sees that these scales are not exceeded without proper authority. The Superintending Engineer is empowered to transfer and post Deputy Engineers and Overseers within his Circle. In the interest of administration, however, Executive Engineers of Divisions are

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THE PUBLIC WORKS DEPARTMENTS

consulted before posting these officers to particular Sub-Divisional charges under their control. It is also the duty of the Superintending Engineer to recommend removals and transfers of Executive Engineers from their own divisions. The supervision and control of assessment of revenue from irrigation works within his circle rests with the Superintending Engineer. The Superintending Engineer is authorities, civil or military, within his Circle.

Under the Superintending Engineer, South Gujarat Circle, is the Executive Engineer, Surat Division ; and under the Superintending Engineer, Tapi Construction Circle there are 10 Executive Engineers in charge of the divisions, besides and Executive Engineer who acts as the personal Assistant to the Superintending Engineer.

Executive Engineers.—The Executive Engineer is responsible to the Superintending Engineer of his Circle for the execution and management of all works within his division. He has to see that proper measures are taken to preserve all buildings and works in his division and to prevent encroachment of Government lands in his charge. He is responsible to see that the surveying and mathematical instruments in his division are properly cared for and to report on their condition to the Superintending Engineer at the end of each working season. In addition to his other duties, he is the ex-officio professional adviser to all the State Government offices situated within the limits of his charge, on all technical matters.

The Sub-Divisional Officers.

The Sub-Divisional Officers.—The Sub-Divisional Officers are responsible to the Executive Engineer in charge of the division for the management and execution of works within their sub-divisions.

The Overseers are in charge of sections under the sub-divisional officers.

The activities of the Public Works Department in regard to Roads and Buildings and Irrigation relate to construction, repairs and maintenance of roads, Government buildings and irrigation works financed by Government and placed in charge of the department. In Surat district as on March, 31, 1958 the department maintained 607.00 miles of metalled road and 286.67 miles of unmetalled roads.

In addition to funds from the general revenues of the State allocated for expenditure on roads, there are three other funds maintained for the construction, repairs and maintenance of roads *viz.*, (1) the Central Road Fund, (2) the State Road Fund and (3) the Bombay State Development Fund. The Central Road Fund is in charge of the Government of India which allocates amounts from the Fund for Communication works.

Expenditure is incurred in the district for roads from all these funds.

THE PUBLIC WORKS DEPARTMENT

Electrical Organisation.

Electrical Organisation.—Government was for some time past actively considering the question of reorganising the final set-up of this organisation after taking into account the various agencies functioning in the component parts of the New State of Bombay. The organisation has now been placed under Electrical Engineer to Government with five Electrical Divisions each under an Executive Engineer with their headquarters at Ahmedabad, Bombay, Poona, Nagpur, and Rajkot. These Divisions are further divided into Sub-Division according to the need of the areas. Surat Electrical Sub-Division working under the Ahmedabad Electrical Division caters to the needs of Surat district along with other adjoining districts.

The Executive Engineer has to do duties relating to electrical installations in Government buildings such as execution of original works, carrying out special repairs and maintenance of those works. He is also Electrical Inspector under Indian Electricity Act (XI of 1910) and carries out inspection of Medium Presssure and High Tension electrical installations, power houses, mills, cinemas etc.

Public Health.

Public Health.—Public Health activities in Surat district fall under the jurisdiction of Public Health Works Division, Surat which has the following Sub-Divisions under it :—

(*a*) Nadiad Water Supply and Drainage Sub-Division ; (b) Boring works Sub-Division ; (c) Godhra Sanitary Sub-Division ; (d) Salsette Water Supply Sub-Division ; (e) Bulsar Sanitary Sub-Division ; (f) Broach Water Supply and Drainage Sub-Division. The Public Health Works Division is in charge of the Northern Public Health Circle located at Ahmedabad.

The main function of the Public Health Wing of the Public Works Department is to undertake and execute Government water supply and drainage schemes and to help local bodies in the preparation and execution of Public Health Schemes falling under the purview of the local Self Government and Public Health Department.

Though the subject of Public Health is left to local bodies so far as environmental sanitation by Public health engineering is concerned. Government is also taking up Public Health schemes at pilgrim centres, industrial centres and in some other areas where the local bodies are financially weak to take them up. Two small water works at Bansda and Dhrampur in Surat district are maintained by Government Schemes of (1) Improvement to Navsari Water Supply Scheme costing Rs. 11.6 lakhs ; (2) Improvement to Surat Water Supply Scheme Head Works

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costing Rs. 9.61 lakhs ; (3) Bulsar Water Supply Scheme costing Rs. 32.00 lakhs ; (4) Improvement to Rander Water Supply Scheme costing Rs. 1.12 lakhs are under execution as deposit schemes, while schemes of (1) Surat drainage (costing Rs. 133.4 lakhs) and Improvement to Surat Water Supply Filteration Plant (costing Rs. 14.65 lakhs) in Surat district are being executed by local bodies. A number of village water supply schemes such as Ajarai, Deodha, Durdra, Kachali, etc. in Surat district are under preparation. Buduli Water Supply Scheme costing Rs. 4 lakhs, Bilimora Water Supply Scheme costing Rs. 16.95 lakhs, Vyara Water Supply Scheme costing Rs. 5.95 lakhs are ready and are expected to be taken up for execution aftrer funds are sanctioned for them.

Gujarat State Road Transport Corporation.

Gujarat State Road Transport Corporation.

Nationalisation of passenger transport was decided upon by the State Government in August, 1947 and operations were started departmentally in June, 1948, the administration of which was subsequently handed over to a statutory corporation in December, 1949 under the provisions of the Road Transport Corporation Act (XXXII of 1948). Since then the Corporation has been reconstituted under the Road Transport Corporation Act, (XXV of 1950).

Organisation.

For administrative convenience of operations the entire State was originally divided into a number of viable units called divisions. The officer in charge of each division is the Divisional Controller who is a Class I Officer. The Divisional Controller is immediately under the control of the Central Office of which the General Manager is the administrative head, assisted by eleven departments, *viz.*, (1) Administration, (2) Traffic, (3) Mechanical Engineering, (4) Accounts and Audit, (5) Statistics, (6) Security, (7) Stores, (8) Civil Engineering, (9) Secretarial, (10) Legal and (11) Central Workshops.

The nationalisation of services was started in the district in February, 1953. The Divisional Controller, Surat Division, is the head of the division and responsible for the operations. He is assisted by 8 Class II officers, who are charged with the following functional responsibilities.

Administration and Traffic.—There are two officers under these heads of activity. The Divisional Traffic Officer who is incharge of all matters related to traffic and operations and the Labour Officer who looks after all matters relating to labour relations with the Administration. Matters relating to publicity in the division are also looked after by the Labour Officer.

GUJARAT STATE ROAD TRANSPORT CORPORATION

Accounts and Statistics.—These branches are manned by two Officers, the Divisional Accounts Officer and the Divisional Statistician.

Technical.—The technical side of the division is looked after by the Divisional Mechanical Engineer with the assistance of a Divisional Works Superintendent. Besides, there are as many Depot Managers as there are depots, who are wholly responsible for the working of the depot.

Statistics

The operations started with 23 buses plying on 9 routes. By 31st May, 1957 the operations were spread over practically the whole district, the division holding a fleet of 210 buses plying on 164 routes. The buses put on the road have, on an average, a seating capacity of 39.8, exclusive of seats for the driver and the conductor. The average daily mileage operated by these buses during May, 1957 was 17,121 miles carrying on an average 81,242 passengers per day.

The division also holds a fleet of 150 trucks as on 31st May, 1957. These trucks operate as public carriers on a contract basis, on terms prescribed by the corporation. Besides these contracts, scheduled lorry services are also operated on the Surat-Bombay route every day except Saturdays, for the carriage of goods.

Workshops, Depots and Garages.

The light and heavy repairs of the buses and trucks are carried out at the Divisional Workshop, which is situated at Surat. Further, after the operation of every 12,000 miles the vehicles are routed by the depots to the Divisional Workshop for preventive maintenance. In addition a number of depot workshops are situated at each of the following places for the daily maintenance of the vehicles ; *viz.*, Surat (62), Navsari (31), Bulsar (19), Bilimora (15), Madhi (11), Nargol (9), Bardoli (8), Mandvi (7), Ankleshwar (6), Jagadia (6), Rajpipla (5) and Ahwa (3). The number of vehicles attached to each of these depots is given in brackets. Regular daily servicing, weekly and 3,000 mile maintenance are carried out in these depots.

For the convenience of the travelling public the corporation has been providing a number of amenities. So far bus stations have been erected at Surat, Bulsar, Navsari, Chikhali and Rander.

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GUJARAT STATE ROAD TRANSPORT CORPORATION

Canteens with "pan-bidi" stalls and fruit-stalls have also been attached to them at Surat, Navsari, Bulsar and Chikhali. Licensed hawkers are also provided at these places.

The corporation also provides welfare facilities to its employees. Facilities for sports, medical attention and canteen have been provided for workers at Surat and rest-rooms have been opened at Surat, Navsari and Bulsar for the inspection staff. About 20 tenements for the staff are under construction in the proposed housing colony at Surat.

FISH AND FISHERIES.

FISHERIES

Until 1949, the fisheries in the district were not being directly supervised by the Department of Fisheries, as no special officer for this purpose was posted in the district. In October, 1949, the department appointed a Superintendent of Fisheries, and posted him at Bulsar. This officer is entrusted with the supervision of fisheries in the Surat and Broach districts. A clerk-typist and a peon are attached to his office. The aforesaid officer is styled "Superintendent of Fisheries, Surat and Broach Districts" and works directly under the Director of Fisheries, Gujarat.

The duties of the Superintendent of Fisheries, are as under :—

(i) To attend to complaints of fishermen and to devise ways and means to improve their trade as well as their socio-economic condition.

(ii) To supervise the administration of the fisheries schools in the district.

(iii) To encourage formation and supervision of fishermen's co-operative societies.

(iv) To investigate applications from fishermen for loans from Government.

(v) To watch and effect loan recoveries and credit the money in the treasury.

(vi) To encourage fishermen to take advantage of the different schemes of the department such as mechanisation of fishing craft, etc., and to scrutinize their applications and to guide them whenever required.

(vii) To collect statistics of fish and other data pertaining to fisheries and fishermen of the district.

(viii) To serve as member and to attend the meetings of the District Development Boards and their sub-committees.

Since the appointment of the Superintendent several co-operative societies of fishermen have been organised. There are in this district at present twelve such societies which are functioning satisfactorily

Fishermen.

The fishermen in the district are adventurous and hard working. Many of them migrate to the Saurashtra region in certain seasons and exploit fishing areas off that cost. They are not, however, economically better off and have to depend on the traders from whom they have to take short term advances. Efforts are being made by the department to relieve the fishermen of their difficulties by formation of co-operative societies and grant of loans. The fishing boats of these fishermen are mostly sail boats depending on wind and tide for their propulsion. The fishermen have not yet realised fully the advantages of mechinised fishing. Special efforts are, therefore, being made to induce fishermen to mechanise their craft for which the department offcers 50% of the cost of the engine as subsidy and the remaining 50% as loan. This will enable them to cruise long distances in less time and land fish in a better condition. The two fisheries schools established by the department at Kolak and Umarsadi have proved immensely popular and there has been a demand from fishermen for the opening of new schools. The majority of fishermen are *Machhis*. People of other communities such as Kharwas, Dhimars, and Khars also undertake fishing in season as a subsidiary occupation.

In addition to the schemes mentioned above, the following schemes will be undertaken during the Second Five Year Plan :—

(*i*) Grant of loan and subsidy for development of fisheries.

(*ii*) Training of fishermen-youths on mechanised fishing craft.

(*iii*) Mechanisation of indigenous fishing craft.

(*iv*) Scheme for stocking of inland waters with carp fry.

(*v*) Establishment of fisheries schools along the cost.

(*vi*) Provision for improvement of landing and harbour facilities.

CHAPTER 16.

Developmental Departments.

FISHERIES

Fisheries Schools

There are two fisheries schools, one at Kolak and the other at Umarsadi in this district, which are run by the department. These are vocational schools preparing children of fishermen for the Fisheries School Certificate Examination, which is equivalent to Primary School Certificate Examination. Each school is equipped with a carpentry workshop and a skilled carpenter teaches boat building and net making, drawing and carpentry subjects. The headmaster of each schools, who is a Science Graduate, teaches fisheries, which includes elementary knowledge of common fishes, study of indigenous and exotic nets, different kinds of boats, methods of fish capture, fish preservation, physiology and hygiene and nature study. Arrangements are made for teaching domestic science to girl students when boys go for carpentry classes. In addition to the above special subjects, fisheries schools teach regional languages, arithmetic, history, civics, and Hindi *i.e.* subjects normally taught in primary schools.

CHAPTER 17 - WELFARE DEPARTMENTS

CHAPTER
Welfare Departments.
EDUCATION
Organisation.

DEPARTMENT OF EDUCATION.

FOR PURPOSES OF PRIMARY AND Secondary Education, Surat district is placed under the Educational Inspector, Surat District. The Officer belongs to Class I of the State Educational Service and is directly under the control of the Director of Education. He is responsible in his district for :—

(*i*) the supervision of primary education ;

(*ii*) the administrative control of all Government primary and secondary schools and training institutions under the control of the Education Department ; and

(*iii*) the control and inspection of all secondary schools. including English teaching schools, vocational high schools (*i.e.* agricultural, commercial and technical high schools), training institutions for primary teachers and such special schools as are under the control of the Education Department.

In so far as girls' schools and institutions for women are concerned. the Inspectoress of Girls' Schools (State Educational Service Class I), performs the functions and duties of the District Educational Inspector in respect of :—

(*a*) the inspection of girls' secondary and special schools in the district ; and

(*b*) visiting girls' primary schools in the district and making suggestions for improvement.

In the carrying out of his duties of inspection and control, the Educational Inspector is assisted by an inspecting staff consisting of one Deputy Educational Inspector (State Educational Service, Class II) and a number of Assistant Deputy Educational Inspectors (Bombay Educational Service, Class III), who are directly responsible, under the Educational Inspector, for the superintedence and inspection of primary schools in the district under section 48 of the Bombay Primary Education Act (LXI of 1947). There are also two Assistant Deputy Inspectoresses (State Educational Service, Class III), who, under the administrative control of the Educational Inspector, Surat District are responsible for the inspection of primary girls' schools in the district.

CHAPTER 17. — Welfare Departments.

EDUCATION

There is also one Assistant Deputy Educational Inspector for Sindhi Schools attached to the office of the Educational Inspector, Surat with jurisdiction over all the Sindhi primary Schools in Gujarat.

There are separate Inspectors, having jurisdiction over the whole State, for Physical Education, Visual Education, Drawing and Craftwork and Commercial Schools who carry out organisation and inspection in their respective spheres. These Inspectors have naturally jurisdication in the Surat District in regard to their respective subjects directly under the Director of Education.

The Deputy Educational Inspector, Surat is the Chief Government inspecting officer of the District so far as primary schools are concerned. Under the rules framed under the Bombay Primary Education Act, he decides the question of recognition of private primary schools. He has to keep close touch with the working of primary schools maintained or approved by school boards, Social Education classes and village libraries. He has to report upon the housing, equipment, staff, efficiency of instruction, etc. of the primary schools so that the department may be in a position to determine whether the School Board is conducting its schools satisfactorily. All aided schools are inspected by him or by the inspecting staff under him. He also assists the Educational Inspector in the inspection of secondary schools and reports on any specific points about them whenever he is required to do so by the Educational Inspector.

Primary Education

Primary Education :-It is the declared policy of Government that universal free and compulsory primary education should be reached by a definite programme of progressive expansion, and under the Bombay Primary Education Act, the State Government has taken upon itself the duty of securing the development and expansion of primary education in the State. A minimum course of seven years' education for every child is the objective aimed at. The agencies employed for discharging this duty are the district school boards and "authorised municipalities".

As the Surat City Municipal Borough is an "Authorised Municipality" under section 3 of the Bombay Primary Education Act (LXI) of 1947 primary education is administered within the Surat Municipal Borough limits by the Municipal School Board, Surat.

District School Board.

"Approved Schools"* within the area of all non-authorised municipalities and of the District Local Board are under the control of the Surat District School Board. This School Board is composed of sixteen members. Of these three are appointed by Government, one being a Government Official. The remainig

*"Approved school" means a primary school maintained by the State Government or by a School Board or by an authorized municipality or which is for the time being recognized as such by a School Board or by the State Government or by an officer authorised by it in this behalf. (Section 2 of the Bombay Primary Education Act, LXI of 1947).

13 members are elected by the Surat District Local Board. The rules prescribe that of those elected, two shall be from the Scheduled Castes and Scheduled Tribes and *three* should have passed the matriculation or Second Year Training Certificate examination.

School Board, Surat Municipal Borough

The School Board of the Surat Municipal Borough is composed of *thirteen* members of whom *two* are appointed by Government, one being Government official. The remaining members are elected by the Surat Municipal Borough. Under the rules, of the elected members, one is to be from the scheduled castes and or scheduled tribes and three should have passed the matriculation or Second Year Training Certificate examination.

Working of Primary Education Act

Under the Primary Education Act and the rules thereunder all district school boards and authorised municipalities have to maintain all adequate number of primary schools in which instruction is given through the medium of the local regional language. For children whose mother-tongue is different from the regional language of the area, school boards have been instructed to open schools in their language if the number of such children is not less than 40 in the first four standards and 20 in the upper standards. The teaching of the regional language of the area is also compulsory in such schools from standard III onwards. An authorised municipality has to make such provision in its budget as will enable approved schools in its area to receive grants at the rates authorized by Government. Responsibility is laid on the District School Board to maintain a schedule of staff of Assistant Administrative Officers, or Supervisors, primary teachers, clerks and inferior servants and other staff, sanctioned by Government setting forth the designation, grades, pay and nature of appointment of different members. The members of this staff are servants of the District School Boards and receive their pay, allowance, etc. from the Primary Education Fund maintained by the School Board. No change or alteration can be made in the schedule of staff without the previous sanction of Government. The School Board of the Surat Municipal Borough has also to prepare a similar schedule of its permanent staff. This School Board is however, authorised to employ with the sanction of the Municipality such temporary staff as may be required. Expenditure on such staff will not, however, be admissible for grant by Government unless the previous sanction of Government has been obtained. The rules made under the Act lay down model conditions of employment of teachers in private schools.

The annual budget of the District School Board has to be submitted to the Director of Education for sanction. The District School Board derives its income mainly from Government grants which form nearly 88% of its total expenditure. It also receives from the District Local Board a contribution equal to such portion of its income from the cess of land revenue and water rates as may be fixed by Government from time to time, and from

non-authorized municipalities whose schools are under its control such proportion of the ratable value of properties in the area of the respective municipalities as may be fixed by Government from time to time. The District Local Board Surat has under the present rules, to contribute 15 pies of the 3 annas cess on land revenue and water rates that it is allowed to levy. The amount to be paid by non-authorised municipalities has been fixed by Government as 5 per cent of the ratable value of properties in their respective areas. The primary education fund of the Surat Municipal Borough is composed partly of the grant payable to it by the State Government on account of primary education, which forms nearly 45 per cent of its expenditure on primary education.

The chief executive officer of the Surat District School Board is its Administrative Officer. This officer is appointed and paid by the State Government. The Administrative Officer of the School Board of the Surat Municipal Borough is, however, an officer of the Municipality employed by the Municipality itself. Under the administrative officers are Assistant Administrative Officers or Supervisors, primary school teachers, clerks and inferior servants and other staff under the employ of the District School Board or the authorized Municiplity as the case may be. The Administrative Officer is responsible for the general administration of all primary schools maintained by the school board. He is responsible for carrying out the suggestions made from time to time by Government Officers. It is his duty to advise the School Board on all matters connected with primary education. He is also a member and Secretary of the Staff selection committee composed besides himself of the Chairman of the School Board and the Educational Inspector of the district. Its duty is to select candidates for appointment as Assistant Administrative Officers or supervisors and teachers. The committee selects also the teachers to be deputed for training. The District School Board or the authorized municiplity or their Administrative Officers have to make appointments of the candidates in accordance with the directions given by the committee. The selection of the candidates and teachers are made in accordances with the instructions issued by Government. The Administrative Officers has power subject to the general instructions issued by the Director of Education, to promote, transfer, and take all disciplinary action, including removal or dismissal, against the staff. His orders, however, are subject to appeal to a tribunal consisting of the Chairman of the School Board and the Educational Inspector of the district. A primary school teacher who was a guaranteed teacher on the date the Primary Education Act, came into force, has, however, a right of further appeal to the State Government against any order of removal or dismissal.

Statistis

The statistics that follow relate to the Surat district as a whole for the year 1952-53 :—

There were 1,418 primary schools (both lower primary *i.e.* teaching standards I to IV and upper primary, *i.e.*, teaching

standards V to VII) of which 95 were exclusively for girls. The distribution of the schools by management was as follows :—

Government	2
District Local Board	931
Surat Municipal Borough	55
Other Municipalities	52
Schools aided by Government	2
District Local Board	360
Schools un-aided	16
	1,418

There were 94,006 boys and 64,358 girls in the lower primary stage (i. e. standard I-IV) and 25,098 boys and 11,301 girls in the upper primary stage (i.e. standards V-VII) or a total of 1,94,763 pupils in all primary schools. The percentage of school-going children to the population was 10.6.

The number of teachers in primary schools was 5,170 of whom 4,133 were men and 1,032 women. This works out roughly at 37.6 pupils per teachers. Only 2,673 of the men teachers and 599 of the women teachers were trained.

There are 3 primary training institutions, 1 for men (Government) 1 mixed (non-Government) and 1 for women (non-Government) training 214 men and 135 women. or a total of 349 teachers for the year.

The total direct expenditure on primary schools was Rs. 61,62,110 and it was met from the following sources :—

	Rs.	p. c. to total.
1. Government	48,10,161	77.5
2. District Local Board	5,27,541	8.6
3. Municipal Funds	5,54,840	9.1
4. Fees	78,407	1.1
5. Other Sources	1,91,161	3.7
	61,62,110	

CHAPTER 17.

Welfare Departments.

EDUCATION

The average cost of educating a pupil was Rs. 33 per annum of which Government's contribution came to Rs. 26.8.

In Surat city in 1952-53, there were 55 municipal primary schools and 16 private primary schools. The total number of pupils was 27,342 (24,419 in Municipal schools and 2,923 in private schools). The expenditure of the School Board of the Municipality was Rs. 10,44,941 ; out of which Rs. 4,75,553 was contributed by the Municipality. Grants to private schools amounted to Rs. 35,445.

Free, complusory primary education was introduced in the Surat District Local Board area, in 34 villages from 1946 for age groups 7 to 11. The estimated population of the area (in September 1951), was composed of 1,59,716 males and 1,60,963 females. The total number of children of the age groups under complusion was 46,540 and the total number actually attending school was 29,174 or 62.7 per cent.

Free compulsory primary education was introduced in Surat City Municipal area on 1st January 1920. Compulsion was in force for age groups 6 to 11. The population according to 1951 census was composed of 1,16,426 males and 1,06,756 females. The total number of children of the age groups under compulsion was 22,117. The number attending schools was 21,792 or 98.4 per cent.

There was dearth of buildings to house the primary schools. In 1952-53, there were 1846 buildings in the District Local Board area in which primary schools met. Of these 693 were owned by the District School Board, 2 were Government buildings and 371 were rented and the rest were housed in temples, dharmashalas and other places.

In 1952-53 primary schools in the Surat Municipal area were housed in 71 buildings, of which only 4 were owned by the municipality, 2 by private managements and 65 were housed in rented and free buildings.

Basic and Craft Schools

Basic and Craft Schools.—A new ideology has been influencing the educational activities of the State since 1937-38. It has come to be recognised that education must centre round some form of manual productive work.According to the figures for

1953, there were 24 basic schools in the Surat district where education was made to centre round spinning and weaving and 290 craft schools. Spinning and weaving formed the craft in 263 of the craft schools, cardboard and carpentry in 10 and agriculture in 17.

CHAPTER 17. Welfare Departments. EDUCATION.

Secondary Education

Secondary Education.—Secondary education is now under the general regulations of Government and Government control is exercised by means of conditions for receipt of grant-in-aid. At the end of the high school course an examination is conducted by the Secondary School Certificate Examination Board, and the students who pass are awarded the Secondary School Certificate. The head office of this Board is in Baroda sina 1961. The first examination was held in 1949 by the Board with its Lead office at Poona. The examination provides optional courses for pupils with varied interests and aptitudes. Each university, however, lays down the subjects which a candidate must take for entrance to its courses.

Statistics.

The statistics that follow relate to the year 1952-53 for the Surat district:—

There were 83 secondary schools in the district with a total of 23,661 pupils (19,047 boys and 4614 girls). Ten of these schools were exclusively for girls and 73 for boys. The number of girls in the schools exclusively meant for girls was 2,752 while 1,862 girls were in mixed schools. The following statement shows the number of schools under diffrent managements and the number of pupils in them :-

	Number of Schools	Number of pupils
Central Government	1	73
Government	8	1,401
Local Authorities	—	—
Aided private	67	21,601
Unaided	7	586
Total ...	83	23,661

CHAPTER 17.

Welfare Departments.

EDUCATION

Thus secondary education was imparted mainly by private agencies aided by Government grants.

There were 1,189 teachers in all secondary schools, of whom 999 (552 trained and 447 untrained) were men and 190 (100 trained and 90 untrained) women.

Secondary School

The total expenditure on secondary education was Rs. 29,70,938 of which Rs. 11,52,658 (or 38.88 per cent) came from Government funds, Rs. 13,64,161 (or 45.4 per cent) from fees ; 2,451 (or 0.08 per cent) from endowments and Rs. 4,51,668 (or 15.64 per cent) from subscriptions and the other sources.

The total annual average cost per pupil in secondary schools was as follows: –

	Total cost.	Cost to Government
Government schools	143	92
Board schools	—	—
Aided private	123	43
Unaided schools	60.4	—

Drawing examination :—

Government hold Drawing examinations: elementry drawing examination and intermediate. In 1952-53, 973 appeared for the elementary, of whom 593 passed. For the intermediate. 539 candidates appeared and 349 passed.

Special Schools.—(*a*) Technical schools. These come under the jurisdiction of the Director of Technical Education and an account of these is given under the paragraph relating to Technical and Industrial Training.

Schools for Defectives

(*b*) *Schools for defectives.*—There were no institutions for the education of defectives in Surat district during the year 1952-53.

Language Schools

(*c*) *Language schools.*—There were three institutions imparting instructions in Sanskrit, namely (1) Suryapur Sanskrit Pathshala, Surat (2) Nrusinh Sanskrit Pathshala, Sandhiar, T. Olpad. (3) V. T. Gurukul Sanskrit Pathshala, Surat. They had on their rolls 91 boys and 1 girl. There was also a Hindustani Shikshan Sanad Class, Surat with 22 students.

Oriential Research Institutions

(*d*) *Oriential Research Institutions.*—There was one oriential research institution in Surat district, situated in Pardi T. Pardi. The institution is named Swadhyaya Mandal Anand Ashram, and it devotes itself to vedic research and also to organising and conducting sanskrit examinations at different centres all over India. The institution maintains a well-equipped library and a press and publishes books and periodicals in Sanskrit with a view to popularising Sanskrit among the masses.

Certified schools

(*e*) *Certified Schools.*—There were no certified schools in the district during 1952-53.

Other Special Schools

(*f*) *Other special schools.*—The following is a list of other kinds of special schools with a number of institutions of each kind and of the pupils enrolled :—

	Number of institutions	Number of pupils
Nursery and Kindergarten schools ...	6	260
Art Schools (teaching Modern art, photography, short-hand and type-writing schools).	11	705
Cutting Tailoring and sewing ...	—	—
Gymnasia	5	613
Music schools and classes	1	26

CHAPTER 17.

Welfare Departments.

EDUCATION

Physical Education.—Two Assistant Deputy Educational Inspectors holding Diploma in Physical Education look after and organise physical education in the district. One of the two posts is meant for a woman to supervise the physical training of girls in primary and secondary schools. Physical education is a compulsory subject in secondary schools. There is a regular examination in it. Pupils attend the playground regularly and the programme of physical education is organised regularly in most of the secondary schools. In primary schools also provision for physical education has been made but there is no regular examination. Children in primary schools play games.

Every year a two months' course in physical education is organised at suitable places in the district by the Assistant Deputy Education Inspector for physical education. About 50 primary teachers are trained and these teachers organise physical education in the primary schools where they work.

A certificate course for one year in physical education is organised by the Shri Chhotubhai Vyayam Maha Vidyalaya at Rajpipla, Broach district for under-graduate teachers of secondary schools. A few secondary school teachers from Surat district are deputed every year to that insititute for training in physical education. A few teachers are also sent for training in physical education (Secondary Teachers' Course) at Kandivali. Graduate teachers are trained for the diploma course at Kandivali for one year.

Boy Scout Girl Guides and Junior National Cadet Crops.

Boy Scouts, Girl Guides and Junior National Cadet Corps :—

In 1952-53 there were in the district 2,919 Boy Scouts and 859 Girl Guides. There were 2 Junior National Cadet Corps units in Surat district during 1952-53 with 66 Cadets under training and 2 officers.

Madical Inspection.

Medical Inspection.—No medical inspection is held in colleges and primary schools. Pupils in secondary schools are medically examined thrice during their career. The services of private medical practitioners are secured on a part time basis to examine the pupils.

Visual Education.

Visual Education.—An Assistant Deputy Educational Inspector is in charge of the work of Visual Instruction in the Surat district. Visual instruction is generally provided by means of (1) Magic lanterns, Slides and strips. (2) Epidioscope and (3) Film projectors.

School Broadcast.

School Broadcast.—Fifty per cent of the high schools in the district have their own sets of radio receivers. Every institution gives a chance for its pupils to attend educational broadcasts.

EDUCATION Social Education.

Social Education.—The work of Social Education in the district was looked after by the Regional Social Educational Committee for Gujarat, Surat. During 1952-53, 699 Social Educational Classes were functioning in the district. 6,274 adults were made literate and expenditure to Government on this account came to Rs. 26,662.

Village Libraries.

Village Libraries.—The number of village reading rooms started under the Social Education Scheme at the end of 1952-53 was 120 in addition to 235 libraries taken over from the merged Baroda State and a grant amounting to Rs. 6,223 was paid to them.

Industrial and Technical Training

All Technical and Industrial Institutions and Courses leading upto the diploma standard (non-University grade), excluding those falling under the control of a University, are controlled by the Director of Technical Education, who is assisted by the State Council of Technical Education. The Director of Technical Education is the Secretary of the Council.

TABLE No. 1

THE STATEMENT SHOWING INSTITUTIONS REGISTERED FOR INSPECTION EXAMINATION AND GRANT-IN-AID IN SURAT (DISTRICT) GUJARAT STATE.

Name of the Institutions 1	Management 2	Course of Institutions 3
F. S. Parekh Technical Institute, Chowk Bazar, Surat.	Surat Municipality	Mechanical Engineering (Certificate) Automobile Engineering (Certificate) Carpentry Practical Carpentry Motor Mechanic Turner Fitters Machinists Pattern Making.
Surat Stree Mandal, Wadifalia Sidhamata Road, Surat.	Surat Stree Mandal, Surat	Teachers Training Course in needle craft. Tailoring Course in Women's and Childrens Garments. Embroidary and Fancy work.
Valmiki Kayastha Mahila Mandal, Damfalia, Gopipura main road, Surat.	Valmiki Kayastha Mahila Mandal, Surat.	Tailoring Course in Women's and Childrens Garments.
Jain Mahila Grahodyoga Shala, Rampura, Surat.	Desai Pole, Jain Pedhi, Surat	Tailoring Course in Women's and Childrens Graments. Embroidary and Fancy work.
Bhagini Samaj, Kanpura road, Vyara, District Surat.	Bhagini Samaj, Vyara.	Tailoring Course in Women's and Childrens Garments.
Janta Shivan Class, Balaji road, Surat.	Shri Amdavadi Audichya Brahmin Yuvak Mandal, Surat.	Tailoring Course in Women's and Childrens Garments.
Navsari Mahila Udyog Mandir, Sayaji road, Navsari, District Surat.	Stree Navsari Mahila Udyog Mandir, Navsari, District Surat.	Tailoring Course in Women's and Childrens Garments. Teachers Training Course in Needle Craft.

CHAPTER 17. Welfare Departments. EDUCATION

TABLE No. 1 (*contd.*)

Jadin Narbheram Sewing Class, Rani talao, Surat.	Surat Lohana Seva Mandal, Surat.	Tailoring Course in Women's and Children's Garments.	
Mahila Vishram, Chimanbhai road, Navsari, District Surat.	Ladies Committee, Mahila Vishram.	Tailoring Course in Women's and Childrens Garments.	
Mahila Sahakari Udyog Mandir, Kotawali str., Balalji road, Surat.	Mahila Sahakari Udyog Mandir.	Tailoring Course in Women's and Childrens Garments.	
Bai Nawazbai Tata Zorastrain Girls School, Navsari.	Board of Trustees.	Emboridary and Fancy work.	

The Government of Gujarat also run the following Institutions, Surat District, Gujapat State.

		Diploma	*Certificate.*
Dr. S. & S. S. Ghandhy College of Engineering Technology, Surat.	Government.	Civil Engineering Mechanical Engineering Electrical Engineering Automobile Engineering	Civil D'man. Plumbing Fitter. Wireman.
Navsari Technical Institute, Navsari	Government.	Mechanical Engineering Motor Mechnics Fiter Turner	(Certificate) " " "
Weir Industrial School, Dharampur, Surat	Government.	Handloom Weaving Caprentry.	

The Government also runs Technical High School Centres in conjunction with the Dr. S. & S. S. Ghandhy College of Engineering and Technology, Surat and Navsari Technical Institute, Navsari. Students of Std. VIII and onwards of the local secondary schools are given free instruction at the Centres in the following Technical subjects which the students offer for the S. S. C. Examination.

1. Geometrical and Mechanical Drawing.
2. Workshop Technology (Grade I).
3. Elements of Mechanical and Electrical Engineering.

CHAPTER 17.

Welfare Departments.

MEDICAL Organisation.

THE MEDICAL DEPARTMENT

The Medical organisation of the district (as distinct from the Public Health Organisation) is essentially a Hospital organisation designed to render medical relief to the general population. The Civil Hospital, Surat, is a head quarters Hospital and is owned, staffed, financed and controlled by the State Government. There are Hospitals and dispensaries scatterred throughout the district managed by Government, local bodies and private bodies. The majority of the aided dispensaries in the district are managed by the District Local Board and some are managed by the Municipalities of Surat, Rander and Bulsar. The Government have prescribed that the Municipalities and the District Local Board must spend atleast 4% and 10% respectively of their total annual income on medical relief.

Reports are submitted every year to the Surgeon-General who sanctions the grant-in-aid admissible to the particular local body.

The medical officers in-charge of the Municipal and local board dispensaries in this district are solely controlled by the local bodies as per the rules of the local bodies concerned. The local body pays a contribution to Government at a fixed rate and receives grant-in-aid admissible under the rules for a particular year. The condition for giving grant-in-aid to the local body is that the medical officer appointed by the local body must carry on post-mortem work and medico-legal work and also free treatment of Government servants at the dispensary.

The Civil Surgeon, Surat is the administrative head of the medical organisation in the district. He is directly subordinate to the Surgeon General with the Government of Gujarat. He is in-charge of the Civil Hospital, Surat, and exercises complete control over the medical officers attached to it. . He is also the head of the Government medical officers in the district and is responsible for their efficiency and discipline and for the proper performance by them of their duties. He is, in addition, the inspecting officer of all the dispensaries in the district which he is required to visit twice a year. He is expected to keep himself well informed as to all medical matters in the district and to furnish any information on medical matters which may be required by Government. He has under him (1956) a medical staff of one salaried graduate, three salaried licenciates and seven honorary graduates at the Civil Hospital, Surat.

Civil Hospital Surat

The Civil Hospital, Surat, has a bed strength of 64 out of which 42 are for men and 22 for women. The wards and the offices of the Civil Surgeon and his subordinates are situated in one building having a separate block for out-door patients and the T.B. Clinic. There is also a separate ward for tetanus cases and prisoners. There are no beds reserved for maternity cases. There is no arrangement for a private room and a nursing home. The total number

of in-door patients treated during the year 1956 was 2,035 and outdoor patients 24,560. The income of this Hospital during the year 1956 was Rs. 11,590 and total expenditure Rs. 3,28,073.

There is an Advisory Committee at this Hospital, the members of which meet every two months to review the facilities to patients and to recommend proposals for betterment of patients for Government sanction. The Surgeon General approves the names of the members of the Advisory Committee every year on the recommendation of the Civil Surgeon. The Committee consists of 7 members, 2 ladies, one Harijan and one general, one representative each of D.L.B., Surat and Surat Borough Municipality, the Civil Surgeon being the persons appointed by the Government to hold the post of Chairman of the Advisory Committee.

The Nursing arrangement for this Hospital was taken over by the Government in the year 1941 from the Chairman, Nemchand Melapchand Nursing Association, Surat and now the nursing staff is under the control of the Civil Surgeon. The recruitment of applicants is done by the Civil Surgeon, Surat who along with the Matron interviews them. There is no separate building for accommodating the nursing staff excepting a small block of four quarters which is reserved for the Matron, Sister Tutor, Operation Theatre and one for Staff Nurse or Linen Keeper. Other Nurses are allowed to stay out and they are paid house-rent of Rs. 10 per month.

Leper Hospital.

There is a Leprosy Hospital by name the Parvatibai Leprosy Hospital, Surat, which is managed by a private body known as Missionary Society of the sacred Heart of Jesus. It also receives grant from the Government according to the number of patients treated. There is also a Leper Asylum at Dharampur which is under the control of the Medical Officer, State Hospital, Dharampur, and is fully financed by the State Government. It has an accommodation for 60 patients. At Parvatibai Leprosy Hospital, 150 beds are meant for indoor treatment of lepers.

There is an anti-tuberculosis Hospital in Surat City having accommodation for 30 indoor patients. The hospital is managed by a private body.

In 1956 there were nine hospitals and dispensaries in the district under the management of Government. Out of these six are situated in urban areas and three in rural areas. In addition to these there are 37 hospitals and dispensaries which are managed by local bodies. Out of these seven are located in urban areas and thirty are located in rural areas. All these dispensaries are of the allopathic type and there is only one Ayurvedic Hospital known as Shree Surat Ayurvedic Hospital, Surat.

CHAPTER 17.

Welfare Departments.

MEDICAL

Subsidised Medical Practitioners.

There are 26 Subsidised Medical Practitioners centres, out of which 10 are Allopathic, 14 Ayurvedic and 2 Unani. The names of places where these centres are situated are stated below :—

(1) Godsamba, (2) Ronwel, (3) Pratapnagar, (4) Kafleta, (5) Saraiya, (6) Bhestan, (7) Nagdhara, (8) Motawaghchhipa, (9) Lavachha, (10) Godha, (11) Borifalia, (12) Pinjarat, (13) Parujan, (14) Sathvav, (15) Mohini, (16) Diwed, (17) Sajwad, (18) Khoj, (19) Malwan, (20) Haria, (21) Vankal. (22) Kochwada, (23) Vapi, (24) Rankuva, (25) Dungri and (26) Bhatha.

Out of these 26 centres the control of the last four centres was transferred to the District Health Officer, Surat, from 1st April 1957.

Village Aid Centres.

There are 41 village aid centres in the district. They are in charge of primary school teachers also are trained in giving first aid. They are expected to treat common ailments like malaria, seabies, cough etc. Under this schemes, Government gives them an honorarium of Rs. 12 per month.

Medical College.

There is a Medical College known as Shri O.H. Nazar Ayurvedic Mahavidyalaya, Surat, which is managed by a private institution and imparts teaching in a combined course of Ayurveda and allopathy, leading to the graduate degree. The Government gives grant-in-aid, recurring and non--recurring, on the basis of contributions received by the institution and expenditure incurred by it.

Mobile Van dispensary.

A mobile van dispensary has been started at Vyara recently. The van moves round about the areas of the Songadh and Vyara talukas.

Private Hospitals and dispensaries.

There are 26 private hospitals and dispensaries out of which 14 are situated in urban areas and 12 in rural areas.

Other training facilities.

There is training facility at the Civil Hospital, Surat, for the course in General Nursing only as there is no maternity ward to give training in midwifery.

THE PUBLIC HEALTH DEPARTMENT

PUBLIC HEALTH

The public health of the district is looked after by three agencies *viz.*, the State Government, Local bodies and Village panchayats. Public vaccination and execution of measures necessary for public health are obligatory duties of the District Local Board and the Municipalities. The village panchayats too have certain sanitary functions such as water supply, sanitation and preservation and improvement of public health. The Public Health Department of the State functions as an advisory body to the local bodies in respect of public health and sanitary problems.

PUBLIC HEALTH

Organisation.

The headquarters of the Director of Public Health (*i.e.* the head of the Department) and that of the Assistant Director of Public Health, Northern Registration District (*i.e.* the divisional officer) are at Ahmedabad. The Northern Regitration District includes the districts of Ahmedabad, Surat, Panch Mahals, Broach, Amreli, Mehsana, Baroda, Kaira, Banaskantha and Sabarkantha districts. The duties of the Assistant Director of Public Health in charge of this district include (a) vaccination (*b*) tendering of advice with regard to the sanitation of the various urban and rural circles in his charge (*c*) inspection of birth and death registers when on tour (*d*) supervision of the general health of the district, ascertaining the movement and causes of the various epidemic diseases which may occur in the district, and advising revenue and local authorities as regards remedial and preventive measures, and (*e*) sanitary arrangements of fairs and festivals.

District Health Organisation.

A scheme known as the District Health Organisation was sanctioned by the Bombay Government for Surat district in 1942.

Under this scheme, the District Health Officer is a subordinate officer under the administrative control of the Assistant Director of Public Health, Northern Registration District. Among his duties the following are important :—(*a*) to organise and control the sanitary, anti-epidemic and vaccination work of the area under his charge ; (*b*) to advise the District Local Board, Village Panchayats, and Municipalities that have no Medical Officers of Health, on all matters affecting the health of the residents in their area and on all points involved in the action of local bodies in this respect ; and (*c*) to enforce orders, regulations and rules relating to public health which may be issued by any competent authority. He has powers to enquire into and report to the proper authorities upon the accommodation available in hospitals and dispensaries either maintained or aided by the District Local Board for the isolation of infectious cases occuring in the district and upon any need for the provision of further accommodation. He directs and superintends the work of his own subordinate public health nucleus staff and also of vaccinators, medical offiers in charge of dispensaries and subsidiesed medical practitioners engaged by or directly under the District Local Board so far as public health is concerned, and anti-epidemic workers appointed by the Board.

Sanitory Inspectors

Government offers to pay the municipalities, classified as Class I and II, a grant to cover a part of the salary of the Medical Officers of Health and Sanitary Inspectors. In respect of class III towns subsidy is offered only on the pay of a Medical Officer of Health, at their option, or a Sanitary Inspector, preferably a Chief Sanitary Inspector. Appointment of a Medical Officer of Health has to be approved by the Divisional Officer in prior

consultation with the Director of Public Health and of Sanitary Inspectors by the Assistant Director of Public Health concerned. The Municipalities of Surat, Navsari, Bilimora, Bulsar and Rander have taken advantage of this offer.

Especially after World War II, the activities of the Public Health Department were expanded in all districts. The health services maintained in rural areas in 1955 were as under :—

District Public Health Scheme :

S.No.	*Designation*	*No. of posts*
1.	District Health Officer	1
2.	Epidemic Medical Officers	2
3.	Sanitary Inspectors	6
4.	Sanitary Sub-Inspectors	7
5.	Vaccinators	26
6.	Paid Candidate Vaccinators	1
7.	Mukadams	7
8.	Mazdoors	21
9.	Attendents	41

Malaria Control Scheme :

		Surat I Scheme	Surat II-Scheme, Navsari
1.	Medical Officer. Malaria Control scheme	1	1
2.	Assistant Medical Officer	1	1
3.	Malaria Supervisors	3	3
4.	Malaria Inspectors	3	3
5,	Drivers	5	4
6.	Insect Collectors	2	2
7.	Cleaners	4	4
8.	Havaldars	22	22*
9.	Sepoys	110	110

*Employed for a period of 5 months.

Primary Health Units :

1.	Health Visitors	4
2.	Midwives	4
3.	Trained Dais	4
4.	Sanitary Sub-Inspectors	4
5.	Mukadams	4
6.	Mazdoors	12
7.	Women Attendants	4

2. Maternity and Child Health Centres :

Staff—2 Nurse Midwives at each centre.

(Ministerial establishment such as Senior Clerks, Junior Clerks, Office Peons and Chowkidars have not been included).

In urban areas, there are in all six Sanitary and Health Inspectors and Vaccinators working in this district.

Vaccination.

In Surat district, 12 vaccinators one paid candidate vaccinator and their attendants working in the pre-merger area of the district are the servants of local bodies (District Local Board and the Municipalities) and 14 vaccinators and their attendants absorbed from Baroda State are Government servants.

In the year 1942, in order to take prompt anti-epidemic measures, a scheme of "Shock Squads" was introduced, under which one Epidemic Medical Officer and 2 Sanitary Inspectors were appointed in the district.

As a part of B. C. G. Immunisation and T. B. Control programme, the B. C. G. Units have so far carried out 1,72,989 testings, out of which 89,125 have been found positive, 60,336 negative and 59,201 have been B. C. G. vaccinated. The work is still being continued in the district.

Pub ic Health nstitutions.

Three Combined Medical and Public Health Units were functioning in this district, 1 each at Vapi, Rankuwa, and Bhata. These have now been converted into Primary Health Units with effect from 1st July, 1956. The staff of each unit consits of a Subsidised Medical Practitioner, 1 Health Visitor, 1 Midwife,1 Trained Dai,1 Woman Attendant, 1 Sanitary Sub-Inspector, 1 Mukadam and 3 Sanitary Orderlies. The unit had under it 7-10 villages within a radius of 3-5 miles from the headquarters of the villages for carrying out maternity and child welfare work in these areas. After conversion into Public Health Units, the population to be served by each unit has been increased to about 20,000. A two to four-beded maternity home is provided at the headquarters.

Maternity and Child Health centres are functioning in the district, one at Navsari and the other at Palsana. A staff of 2 Nurse Midwives each is attached to the existing dispensaries. They carry out Maternity and Child Health work in a population of 20,000 each.

Chief Diseases.

The table below gives the figures of deaths due to different diseases in the district from 1950 to 1955.

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TABLE No. 2

SURAT DISTRICT : DEATHS DUE TO CHIEF DISEASES FROM 1950 TO 1955

Name of diseases.	No. of deaths.				
	1951	1952	1953	1954	1955
Cholera	—	—	438	—	—
Smallpox	261	404	45	11	23
Plague	—	—	—	—	—
Enteric Fever ...	243	181	124	147	206
Measles	286	420	162	166	8
Malaria	403	453	385	305	29
Other Fevers ...	13,161	13,914	12,470	9,995	8,639
Dysentery	52	106	127	126	129
Cerebro Spinal Fever	—	3	—	1	—
Diarrhoea	223	332	379	244	254
Pneumonia ...	1,174	1,494	1,231	1,054	866
Phthisis	752	773	649	647	627
Influenza	5	—	—	—	—
Whooping cough ...	91	90	347	78	308
Mumps	—	—	—	—	—
Other respiractory diseases	1,272	1,409	1,528	1,337	2,862
Diphtheria	1	13	20	17	32
Deaths from child-birth	296	414	258	257	357
Chickenpox ...	—	—	—	1	11
Laprosy	51	24	44	39	32
Cancer	234	261	284	257	292
Injuries	355	466	399	435	450
Other causes ...	9,810	10,405	10,118	9,747	9,921

VITAL STATISTICS

Vital Statistics : The compilation of births and deaths for the district is done in the office of the Director of Public Health along with that of other districts in the State. In the municipal areas, the municipalities concerned maintain registers of births and deaths and forward monthly extracts to the Director of

Public Health. In the rural areas, the birth and death registres are maintained by the village officers and monthly extracts are sent by them to the taluka officers for transmission to the Director of Public Health.

Epidemics.

Epidemics : In urban areas, it is the statutory duty of the municipalities to provide special medical aid and accommodation for the sick in times of epidemic diseases and to take such measures as may be required to prevent the outbreak or to suppress and prevent the recurrence of the disease. In rural areas the primary responsibility for dealing with outbreaks of epidemics rests with the District Local Board. According to Government Resolution, General Department, No. 1773/33, dated 23rd April, 1945, every District Local Board is required to set apart annually a lump sum equal to the average of the amount spent during the preceding three years for expenditure on epidemics. A grant is also placed at the disposal of the Director of Public Health for emergency measures. The Collector is empowered to take action in consultation with the District Health Officer and the Assistant Director of Public Health if he finds the measures taken by the Board are inadequate. The District Local Board will be helped in its task by the District Health Officer and his nucleus staff under him and the Mobile Hospital Units. The services of dispensary medical officers and subsidised medical practitioners are also utilised.

Government also pays 50% grant-in-aid to local bodies on their expenditure on anti-epidemic measures provided the local bodies have spent 10 per cent in the case of District Local Boards and 4% in the case of municipalities of their annual income on medical and public health measures excluding anti-epidemic measures.

Smallpox.

Smallpox: From the number of deaths due to smallpox it will be seen that the severity of this disease has been considerably reduced during recent years. Government policy regarding smallpox control is to protect the population by vaccination, which is offered free to the public by Government and local bosies. Segregation of the patients is attempted only in large towns when hospital facilities are available. Disinfection of infected houses and clothes etc., is also carried out to educate the people as to how to protest themselves against smallpox. Since 1954, mass vaccination drive has been started, according to which 3 months in each year mass re-vaccination programme will be undertaken in one- fifth of the population and during the remaining 9 months of the year, primary vaccination work is done in the same one-fifth of the population. In Surat District there are 26 vaccinators, 14 appointed by Government and 12 by District Local Board. There is also one paid candidate vaccinator appointed by the District Local Board. In Surat town, the municipality has appointed one vaccinator and Government has appointed two.

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Plague: Surat district is not generally known to have any plague epidemics.

Cholera.

Cholera : Surat district is not generally known as an epidemic district for cholera, but occasionally cholera outbreaks do occur in this district but generally they do not assume very severe proportions. Since the introduction of the District Health Scheme in this district it has been possible to adopt prompt anti-cholera measures on a large scale immediately an outbreak of cholera occurs. Anti-cholera measures adopted are mass immunisation of the people by anti-cholera inoculations, isolation and treatment of cases of cholera in the temporary isolation hospitals opened in the affected areas, disinfection of water supplies and disinfection of vomits, dejecta and infected clothes etc. The nucleus District Health Staff in co-operation with the dispensary medical officers, subsidised medical practitioners and the staff of the local-bodies, if any, carry out the measures. Temporary medical officers and inoculators are appointed to supplement the above staff whenever necessary.

Malaria.

Malaria : Surat, which is the biggest district in the State with a population of about 1.8 millions, has been divided into two divisions for the purpose of malaria control work. Two fullfledged malaria control units as per The National Malaria Control Programme have been established in Surat district since 1953. Unit No. 1 with headquarters at Surat comprises the talukas of Chorasi, Olpad, Mahuva, Mandvi, Mangrol, Kamrej, Palsana, Vyara, Songadh and Bardoli. Till 1956 the entire area received two rounds of spraying. But in 1956, out of the total population of 934,587, a population of 579,171 was protected by one round of DDT spiay only and the remaining population by two rounds of spray. The areas selected for two rounds were Songadh, Vyara, Mangrol, Mandvi and Mahuva talukas. The spraying oprerations were in June, July and August for the first round and August to October for the second round. The cumulative spleen rate of this unit which used to be 24.8% prior to the institution of malaria control measures in 1953 has been reduced to 2.8 in 1956 as a result of the measures. Likewise, as a result of these measures, nearly 1,00,000 cases of malaria are annually prevented.

Unit No. II, with headquarters at Navsari, includes the talukas of Navsari, Gandevi, Bulsar, Bansda, Dharampur, Valod, Chikhali and Pardi. In 1956, out of the total population of 893,250, a population of 581,002 was protected by one round and the remaining population by two rounds. The spraying period in this unit is the same as that of the other unit. The cumulative spleen rate per cent which used to be 17.4 prior to the institution of malaria control measures has been reduced to 1.6 in 1956. About 51,000 malaria cases were prevented during 1956 alone as compared to the period prior to the institution of control measures.

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Filaria.

Filaria.—Filaria control measures in Surat town were started in 1951 entirely under the auspices of the Surat municipality after a preliminary survey by the Government Malaria Organisation. In 1955, the work was brought under the National Filaria Control Programme and the Surat municipality received free supplies of Dieldrin for indoor spraying and BHC for anti-larval work from the Government of India. In 1956, Diethylcarbamazine was received by the municipality as free supply from the Government of India and a special programme of mass Hetrazan therapy was started. Surat town is, perhaps, the first biggest urban area in the country which has undertaken mass hetrazan therapy on a large scale.

Recent surveys carried out by the Government Malaria Organisation have revealed that Rander town and surrounding villages and most of the coastal areas in Surat district are affected by filariasis. Government have, therefore, decided to institute filaria control measures in these areas by establishing a Filaria Control Unit under the National Filaria Control Programme.

Fairs.

Fairs : There are only two fairs of some importance in Surat district. The following table gives some details of these fairs.

Name of the fair	Taluka and place of the fair	Period of the fair	Attendance (approximate)
Vyara ...	Vyara ...	Pousha Sud 15	10,000
Unai ...	Bansda ... Unai	Chaitra Sud 11 to Chaitra Vad 5	10,000

Both the fairs are being managed by the local bodies concerned with the help of the Public Health Department. Elaborate sanitary arrangements are made as the attendance is large at these fairs. The local body can levy a pilgrim fee if it so desires. Minor fairs are managed by the Revenue Department with the help of the Public Health Department. No elaborate sanitary arrangement are required to be made at such fairs.

Famine Relief.

Famine Relief : When famine and scarcity conditions are declared to exist in the district. the District Health Officer is under the general orders of the Collector so far as medical and sanitary arrangements on sanitary and famine relief works are concerned.

Health Propaganda

Health Propaganda : For Surat district no separate organisation is maintained. The Baroda Propaganda Section and the Sanitary Inspectors, Sanitary Sub-Inspectors and vaccinators during the course of their tour carry out health propaganda.

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COMMUNITY DEVELOPMENT AND NATIONAL EXTENSION SERVICE BLOCKS

COMMUNITY DEVELOPMENT AND NATIONAL EXTENSION SERVICE BLOCKS.

Under the Community Development Programme, one Primary Health Centre at Songadh with 3 sub-centres at (1) Singpur (2) Jamkhadi and (3) possibly at Dwarka are proposed to be established. This centre if established would provide all integrated medical and health services in the block area. The centre will have the following staff :—

1. Medical Officer
1 Compounder
1 Sanitary Inspector
1 Health Visitor or Nurse Midwife
4 Midwives
1 Driver
1 Cleaner
1 Woman attendant
5 Attendants
1 Sweeper

Primary Health Units in National Extension Service Blocks

During 1957-58, it was proposed to open, as part of the Second Five Year Plan, a Primary Health Centre of the Government of India pattern (viz. serving a population of 60,000) at Bansda. It will be of the same pattern as the one at Songadh.

THE LABOUR DEPARTMENT

Organisation

All the offices dealing with labour matters fall within the administrative control of the Labour and Social Welfare Department. The Commissioner of Labour and Director of Employment, Ahmedabad is the head of all such offices.

Deputy Commissioner.

The Commissioner of Labour has now under him the Deputy Commissioner of Labour at Ahmedabad, three Assistant Commissioners of Labour the Chief Inspector of Factories ; the Chief Inspector of Steam Boilers and Smoke Nuisances ; and the Government Labour Officer. The Commissioner of Labour performs the statutory functions entrusted to him under the Industrial Employment (Standing Orders) Act and supervises and co-ordinates the working of the above-men tioned offices under his control.

There are Fourteen Government Labour Officers at the following places viz., six at Ahmedabad, two at Baroda, two at Surat, one each at Porbandar, Rajkot and Bhavnagar,

The Commissioner of Labour Ahmedabad is responsible for the administration of the Bombay Industrial Relations Act (XI of 1946), the Industrial Disputes Act (XIV of 1947), and the Indian Trade Unions Act (XVI of 1926). Under him are three Assistant Commissioners of Labour working in Ahmedabad and two in Rajkot. Conciliation in labour disputes arising in Surat District is attended to by one of the Assistant Commissioners of Labour who have been notified as Conciliators and Conciliation Officers under the Bombay Industrial Relations Act, 1946, and the Industrial Disputes Act, 1947 respectively.

One of the Assistant Commissioners Ahmedabad has been appointed as Registrar under the Bombay Industrial Relations Act, 1946, and has jurisdiction over the whole of Gujarat State. One of the Government Labour Officer has been appointed as Assistant Registrar and has been invested with all the powers of Registrar under the Act. The Registrar's work falls under the following heads, *viz*., (a) recognition of undertakings and occupations ; (b) registration of unions ; (c) main tenance of approved lists of unions; (d) registration of agreement, settlements, submissions and awards ; and (e) maintenance of a list of joint committees constituted under section 48 of the Bombay Industrial Relations Act.

The Deputy Commissioner of Labour has been notified as Registrar of Trade Unions for the State of Gujarat under the Indian Trade Unions Act. The work in connection with the administration of this Act includes registration of trade unions under the Act, the registration of amendments in the constitution of the unions, and preparation of the annual report on the working of the Act in the State.

In Surat District, there were, in 1957, 12 unions registered under the Bombay Industrial Relations Act as representative

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unions. The details about the same are given below :—

S. No	Name of the Union	Membership.	Industry.	Local Area.
1	Surat Textile Labour Union, Surat	1,530	Cotton Textile	Surat Municipal Borough
2	Surat Textile Labour Union, Surat	531	Do.	Chorashi Taluka excluding Surat Municipal Borough
3	Majoor Mahajan Mandal, Navsari	2,469	Do.	Navsari Taluka
4	Majoor Mahajan Sangh, Billimora	2,248	Do.	Gandevi Mahal
5	Surat Silk Mill Woakers' Union, Surat	1,730	Silk Textile	Surat Municipal Borough
6	Surat Silk Textile Labour Union, Surat	695	Do	Chorashi Taluka excluding Surat Municipal Borough
7	Silk Mill Workers' Union, Billimora	75	Do.	Gandevi Mahal
8	Silk Mazdoor Sabha, Navsari	Not available	Do.	Navsari Taluka
9	Dyeing, Bleaching and Finishing Workers' Union, Surat'	Not available	Textile Processing	Surat Municipal Borough
10	Bank Kamdar Sangh, Surat	143	Banking	Surat Municipal Borough and 14 other local areas
11	Surat Electricity Company's Staff Union, Surat	356	Generation and supply of Electrical Energy	Surat Municipal Borough
12	Navsari Electric Kamdar Mandal, Navsari.	35	Do.	Navsari Taluka

There are six Joint Committees registered under the Bombay Industrial Relations Act in the district.

The Office of the Commissioner of Labour performs the following functions:

(1) Compilation and publication of the Consumers' Price Index Numbers for Working Class for Ahmedbad.

(2) Conducting socio-economic enquiries into conditions of labour.

(3) Compiling and disseminating information on labour matters generally and statistics regarding industrial disputes, agricultural wages, absenteeism, trade unions, etc. in particular

(4) Collection of statistics under the Bombay Industrial Statistics (Labour) Rules, 1951.

(5) Publication of two monthlies, *viz*. the 'Gujarat Labour Gazette' in English and the 'Sramdeep' in Gujarati.

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The Labour Officer

Two Government Labour Officers have been posted at Surat to be incharge of Surat and Broach Districts. They are class II Gazetted Officer and belong to a general State Service. Upto September, 1949, there was no separate post of a Labour Officer at Surat, but the districts of Surat and Broach were within the jurisdiction of the Labour Officer, Ahmedabad. With the increase in work devolving upon the Labour Officer, a separate post of Labour Officer was created at Surat. He works under the Government Labour Officer, Ahmedabad, and the Commissioner of Labour, Ahmedabad. The Government Labour Officer is appointed primarily to implement the provisions of the Bombay Industrial Relations Act, 1946, which is a State Act and is also notified as an Inspector under the Minimum Wages Act, 1948, and also under the Payment of Wages Act. In addition, he has been appointed as an Additional Inspector of Factories in respect of certain sections pertaining to the Welfare provisions under the Factories Act, 1948. The Government Labour Officer, Surat, also works, with permission of Government, as the Honorary Inspector under Section 48 of the Bombay Shops and Establishments Act, 1948, appointed by the General Board of the Surat Borough Municipality, Surat, by its meeting held on the 9th December, 1952. The powers conferred and the duties imposed on a Labour Officer under the Bombay Industrial Relations Act are not restricted to any particular section under that Act, but are scattered throughout the whole Act. However, the powers and the duites of the Labour Officers are mainly given in Chapter VI and Section 34 of the Bombay Industrial Relations Act. For the purpose of exercising his powers and performing his duties,a LabourOfficer, may enter any place used for any industry, any place used as the office of any union and any premises provided by an employer for the residence of his employees, and he is entitled to call for and inspect all the relevant documents which he may deem necessary for the due discharge of his duties and powers under this Act. He has also the power of convening a meeting of employees for any of the purposes of the Bombay Industrial Relations Act, on the premises where the employees are employed and he may require the employer to affix a written notice of the meeting at such conspicious place as he may order. A labour Officer is charged with the duty of watching the interests of employees andpromoting harmonious relations between the employers and the employees, of investigating the grievences of employees who are not members of the Approved Union and of members of an Approved Union on the request of such a union, of representing to the employers such greivances and of making recommendations to them in respect of the same and of reporting to the State Government the existence of any industrial dispute of which no notice of change has been given together with the names of the parties thereto. A labour Officer, in certain contingencies acts as a representative of the employees if so authrised by them and where a representative Union does not exist and he is not authrised also by the employees

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to act as their representative and where the employees themselves do not elect their own representative from amongst them, then he becomes their representative *suo motu*. In Short, a Labour Officer has to work as a sort of residual representatives of the employees. He has also to help Representative unions and Approved Unions. He has always to be in touch with the changes in the labour situation in the undertakings in the various industries covered by the Bombay Industrial Relations Act and to report major and important incidents to his superior officers and Government. He intervenes whenever there is a stoppage or strike and gives legal guidance and advice to the employees involved in such incidents and he does likewise in respect of employers in connection with the closures and lockouts which may not be legal. In short, he explains the correct position under the law to the parties concerned with a view to seeing that any illegal action on their part is rectified by them without any delay. A labour Officer is probably the only executive officer envisaged under the Bombay Industrial Relations Act by virtue of powers conferred on him under Section 82 of the Bombay Industrial Relations Act under which, except—the person affected by any offence under the Act, who can make a complaint to the Labour Court, the Labour Court constituted under the said Act cannot take cognisance of any offence except on a report in writing by the Labour Officer of facts consituting such offence. In addition to the above, a Labour Officer can also start proceedings in a Labour Court under Section 79 read with section 78 of the said Act. In short, a Labour Officer has been given a very heavy, onerous and heterogeneous duties and responsibilities. He also informally advises the trade unions whenever they seek his advice on labour matters. For the purposes of certification of standing orders under the Industrial Employment (Standing Orders) Act, a Labour Officer helps the Commissioner of Labour who is the Certifying Officer under that Act in holding elections of the workmen concerned for the purpose of getting the names of their representatives who are to be associated with the discussoins when the draft standing orders are to be certified. During the year 1955 (January to December, 1955) the Labour Officer looked into 1321 individual grievances. As a result of his intervention 90 workers were reinstated and an amount of Rs. 17,544 by way of notice pay, bonus, delayed wages, arrears of wages, ex-gratia payment, etc. was paid to complaining workers as monetary benefits. In 1956, he handled about 2,073 complaints, in connections with some of which 182 employees were reinstated and an amount of Rs. 46,310 was paid to compalaining workers by way of their leagal dues and other monetary benefits.

LABOUR

Welfare centres are run by the Commissioner of Labour Ahmedabad There are in all 34 Labour Welfare Centres in the State one being in Surat. These welfare centres are classified into four types, *viz.*, A, B, C, and D types. A network of these centres with recreational and insturctional

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facilities for workers and their families all over the important industrial areas in the State provides among other things, entertainment by visual aid, exhibitions, dramas, music, indoor and outdoor games and instructions on accident prevention, first aid, hygiene and anti-drink propaganda. The 'A' type centres are located in spacious, well-planned buildings and are equipped with gymnasia, wrestling arenas, shower baths, open spaces for games and sports and children's play-grounds. The 'B' type centres are more or less on a similar but smaller scale, while 'C' and 'D' type centres are housed in hired buildings with provision for indoor games and facilites for outdoor recreational activities.

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Surat has a 'C' type centre and the same was started in August 1949.

Industrial Arbitration and Adjudication.

The Court of Industrial Arbitration (or the Industrial Court as it is shortly called), Ahmedabad, as constituted under section 10 of the Bombay Industrial Relations Act, has jurisdiction over the district. The duties and powers of the Industrial Court are detailed in chapter XIII of the Bombay Industrial Relations Act. The Labour Courts at Ahmedabad exercise jurisdiction over the Surat district. These Courts are presided over by Labour Court Judges and enjoy such powers as are conferred upon them under sections 78 to 86 of the Bombay Industrial Relations Act.

There are two wage Boards appointed for the State, one each for Cotton Textile, and Silk Textile, The Wage Boards are to decide such disputes as are referred to them by the State Government under sections 86 C and 86 KK of the Bombay Industrial Relations Act.

The Bombay Shops and Establishments Act (LXXIX of 1948) has been applied in the district to the areas of Surat, Billimora, Navsari, Bulsar and Vyara Municipalities.

The Employees' State Insurance Scheme has not been extended to the district.

There is no Consumers' Price Index Number for working class for Surat or any other centre in the district.

Factory Department

The Factory Department is under the Administrative control of the Commissioner of Labour, and Director of Employment but the Chief Inspector of Factories has complete control of the technical side of the work of the department over the whole State. The department is responsible mainly for the

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administration of the Factories Act (LXIII of 1948), but the administration of the following Acts has also been assigned to it :—

(1) The Payment of Wages Act (IV of 1936).

(2) The Cotton Ginning and Pressing Factories Act (XII of 1952)—section 9, regarding approval of plans of ginning factories.

(3) The Employment of Children Act (XXVI of 1938)

(4) The Bombay Maternity Benefit Act (VII of 1929)

(5) The Minimum Wages Act, 1948.

The department has a sub-office at Surat, in charge of a Junior Inspector of Factories, an officer belonging to the general State Services. The jurisdiction of this office extends over the district of Surat, part of Braoch district south of river Narbada, Dangs District, and the Nawapur taluka of West Khandesh. The full time inspectoral staff stationed at Surat at present (November 1957) consists of one Junior Inspector of Factories and two Inspector of Notified Factories. They are responsible for the enforcement of the Factories Act and the Rules made thereunder throughout the area assigned to them, every Inspector being allotted a certain number of factories for the purpose of inspection. Under section 8(4) of the Factories Act, the District Magistrate of Surat is also an Inspector for the district of Surat. In addition, all Sub-Divisional Magistrates, Mamlatdars, Mahalkaries, the officers of the Public Health Department, Government Labour officers within the limit of their respective jurisdictions, have been appointed as additional inspectors for certain provisions of the Act. Similarly, the Civil Surgeon Surat, Medical Officer in charge of Navsari Hospital, Navsari, Medical Officer in charge of Novroji Jivanlal Gauzdar Dispensary, Gandevi taluka. Medical Officer incharge of Kathor Dispensary, Kamraj taluka. Medical Officer in charge of Mahuwa Dispensary, Mahuwa taluka, Medical Officer in charge of Palsana Dispensary, Palsana taluka, Medical Officer in charge ofSongadh Dispensary, Songadh taluka, Medical Officer in charge of Mangrol Dispensary. Mangrol taluka. Medical Officer in chargeof Vyara Maternity Home and Dispensary, Vyara taluka, Medical Officer in charge of Bansda State Hospital, Bansda taluka, Medical Officer in charge of Dharamapur State Hospital, Dharamapur taluka, Medical Officer in charge of Bardoli Dispensary, Bardoli taluka, Medical Officer in charge Tadkeshwar Dispensary, Mandvi Taluka, Medical Officer in charge of Olpad Dispensary, Olpad taluka, Medical Officer in charge of Chikhali

LABOUR.

Dispensary, Chikhali taluka, Medical Officer in charge of Pardi Dispensary, Pardi taluka, Medical Officer in charge of Pettit Dispensary, Bulsar, have been appointed as Certifying Surgeons under the Factories Act. Under Rules framed in accordance with section 9 of the Factories Act, a full-time Inspector (but not the District Magistrate or an additional Inspector) is empowered to prosecute, conduct or defend before a court any complaint or other proceeding arising under the Act or in discharge of his duties as Inspector. Full-time Inspectors are also reasponsible for the enforcement of the other enactments with the administration of which the Factory Department has been entrusted. Their activities also extend to securing for labourers welfare amenities, such as education, recreation and sports, co-operative societies and housing.

Workman's COMPENSATION.

"Under the provisions of the Workmen's Compensation Act (VIII of 1923) the Commissioner for Workmen's compensation, Ahmedabad, has been given exclusive jurisdiction over the state. The Commissioner has also exclusive jurisdiction to try all cases arising in the State irrespective of the district in which they occure. The Commissioner has also general jurisdiction over the whole State. For the remaining areas of the State, Civil Judge have been appointed ex-officio Commissioners for their respective jurisdictions. The principal reason for giving the Commissioner for Workmen's Compensation, Ahmedabad, jurisdiction over the whole State is to enable him to settle cases with insurance companies and other firms which have their head offices in Bombay City. But as this arrangement necessarily entails a certain amount of over-lapping, Government have issued instructions under section 20(2) of the Act for distribution of work between the Commissioners and the *ex-officio* Commissioner. Under these instructions, the Commissioner at Ahmedabad is authorised—

(a) to receive deposits for distribution of compensation under sub-sections (1) and (2) of section 8 ;

(b) to issue notices to and to receive applications from claimants in cases of deposits under these sub-sections ; and

(c) to receive agreements for registration under section 28. wherever the accident may have taken place.

Where a deposit is received or an agreement is tendered for registration, the Commissioner concerned notifies the *ex-officio* Commissioner.

Applications for orders to deposit compensation when no deposit under section 8(1) has been received, and other applications provided for the section 22 of the Act should be made to the *ex-officio* Commissioner if the accident occurs in the Surat district. Notices to employers under section 10-A, requiring statements regarding fatal accidents in the district are issued by the *ex-officio* Commissioner and reports of fatal accidents made under section 10-B are received by him. If after notice has been issued by the *ex-officio* Commissioner under section 10-A, the employer deposits the money with the Commissioner at Ahmedabad, the latter notifies the receipt of the deposit to the *ex-officio* Commissioner.

Applications for review or commutation of half-monthly payments have to be made to the Commissioner concerned who passes the original orders.

As regards the cases arising out of accidents on the Southern Railway, they are dealt with by the *ex-officio* Commissioners concerned.

The Commissioner for Workmen's Compensation, Bombay, has been appointed Authority under the Payment of Wages Act for and the Judge, First Labour Court, as Additional Authority under the Payment of Wages Act in addition to his own duties, to hear claims arising out of deductions from wages or delay in payment of wages of persons employed in Ahmedabad the Civil Judges being Authorities for the areas within their respective jurisdictions except for the Ahmedabad.

The Department of Steam Boilers and Smoke Nuisances is under the administrative control of the Commissioner of Labour, and Director of Employment, Gujarat State, but the Chief Inspector of Steam Boilers and Smoke Nuisances has complete control of the technical side of the work of the Department over the whole State. The functions of the Boiler Inspectorate are to inspect Steam Boilers and their accessories annually and register new boilers and to grant working certificates thereof in order to ensure their safe working.

The Inspector in charge of the South Gujarat Division, having his Head-quarters in Ahmedabad, carries out the boiler inspection work in the Surat district.

LABOUR.

The Smoke Nuisances Act is not in operation in Surat District.

THE DEPARTMENT OF PROHIBITION AND EXCISE.

PROHIBITION AND EXCISE Organisation.

Since the introduction of complete Prohibition in the former areas of the State of Bombay from 1st April, 1950, the former Department of Excise has come to be designated as the Department of Prohibition & Excise. The officer charged with the administration of this Department in Surat District is the Collector of Surat. In relation to this department he is responsible to the Director of Excise & Prohibition, Gujarat State. He is invested with various powers under the Bombay Prohibition Act (XXV of 1949), and also exercises powers under the Dangerous Drugs Act (II of 1930), the Bombay Opium Smoking Act (XX of 1936), and the Bombay Drugs (Control) Act (XXIX of 1952). Under the Bombay Prohibition Act, prohibitions or restrictions have been placed on the Manufacture, import, export, transport, sale, possession, use and consumption of liquor, intoxicating drugs or hemp and of articles containing liquor, intoxicating drugs or hemp. The Collector has powers to grant, cancel or suspend licences, permits and passes under the Act.

The Superintendent of Prohibition and Excise, Surat, assists the Collector and is in actual charge of the work of the department in the district. He is also invested with powers under certain sections of the Bombay Prohibition Act. The Dangerous Drugs Act, the Bombay Opium Smoking Act and the Bombay Drugs (Control) Act, 1952. Under him there is one inspector of Prohibition and Excise who is posted at Navsari and two sub-Inspectors at Surat. The Inspector of Prohibition and Excise, Navsari, is in charge of talukas of (1) Bulsar, (2) Navsari, (3) Gandevi, (4) Valod, (5) Chikhali, (6) Mahuva (7) Pardi, (8) Dharampur, (9) Bansda, (10) Bardoli, and Excise matters in Dangs district. One Sub-Inspector, Surat, is in charge of Surat City (all Excise matter only) and the other Sub-Inspector of Prohibition and Excise, Surat is in charge of Prohibition propaganda work in Surat city and all Prohibition and Excise work in the talukas of (1) Chorasi, (2) Mangrol, (3) Olpad, (4) Kamraj, (5) Palsana, (6) Mandvi (7) Songadh and (8) Vyara. There is also a Sub-Inspector of Prohibition and Excise with head quarters at Surat who is in charge of Drugs control work of the whole of the district. The Inspector and Sub-Inspectors are subordinate directly to the Superintendent of Prohibition and Excise, Surat. The Inspector and Sub-Inspectors have also been invested with certain powers under the Bombay Prohibition

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Act, the Dangerous Drugs Act, the Bombay Opium Smoking Act and the Bombay Drugs (Control) Act.

Medical Boards.

In each taluka, a Medical Board consisting usually of two registered medical practitioners (one a Government or Semi-Government official and the other a non-official) has been formed. The functions of the board are to examine any person who applies for a permit to possess opium, *ganja* or *bhang* for personal consumption or for an increase in the existing quota, and, on examination, to issue a medical certificate to such person if it is satisfied that the applicant requires the drug as a medical necessity.

There is another Medical Board for foreign liquor permits on health grounds. The Civil Surgeon, Surat, is the board and examines and grants certificates to applicants from the Surat city. In the rest of the district, the medical officers in charge of the Government or municipal dispensaries do the above duties and send the certificates through the Civil Surgeon, Surat, for his countersignature.

Military personnel.

In the case of individual military personnel, the quota, of foreign liquor is allotted by the Station Staff Officer on a scale commensurate with their rank, and the same can be purchased from the Military Vendor's Licensees only. In the case of military messes, requisitions are issued by the Station Staff Officer, and liquor is issued by the Military Vendor's Licensees on the strength of transport permits issued by the Prohibition and Excise Department.

Enforcement work.

The Police Department is the chief agency to deal with detection, investigation and prosecution of offences under the Prohibition Act. Though officers of the Prohibition & Excise department of and above the rank of Inspector have been invested with powers to investigate offences, these officers generally pass on information of the commission of offences and hand over the cases detected by them to the Police for investigation. The Home Guards Organization also assists the Police in this work. Under section 134 of the Prohibition Act, village officers, village servants useful to Government, officers of other departments of the State Government and officers and servants of local authorities are bound not only to give information to the Police of breaches of the provisions of the Act which may come to their knowledge, but also to prevent the commission of breaches of the Act about which they may have knowledge. Under section 133, officers and servants of local authorities are further bound to assist any Police Officer or persons authorised to carry out the provisions of the Act. Under section 135, occupiers of lands and buildings, landlords of estates, owners of vehicles, etc. are bound to give notice of any illicit tapping of trees or manufacture of any iquor or intoxicating drug to a Magistrate, Prohibition Officer or Police Officer as soon as it comes to their knowledge.

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All revenue officers of land above the rank of Mamlatdar or Mahalkari, all Magistrate, and all officers of the Department of Prohibition and Excise of and above the rank of Sub-Inspector have been authorised, under section 123 of the Prohibition Act, within the limits of their respective jurisdiction, to arrest without a warrant any person whom they have reason to belive to be guilty of an offence under the Act and to seize and detain any article of contraband. The officers so authorised, when he arrests any person or seized and detain any article, has to forward such person or article, without unnecessary delay, to the officer in charge of the nearest police station.

Effects of prohibition.

As Prohibition was introduced in the district in gradual stages from 1947-48, a comparison is given of the consumption of liquor and intoxicating drugs in the year 1945-46, 1950-51 (the year in which complete prohibition was in force), and 1955-56 :—

	1945-46	1950-51	1955-56
Country liquor (in gallons)	1,33,217.00	—	—
Spirits (in dozen bottles)	5,455.00	765.00	115.00
Wines (in dozen bottles)	89.00	—	—
Beer (in dozen bottles)	733.00	—	—
Ganja (in maunds and seers)	105.15	1.35	0.03
Bhang (in maunds and seers)	7.10	0.18	0.09
Opium (in maunds and seers)	32.39	4.32	0.30

The total revenue which was Rs. 52,35,769 in 1945-46, was only Rs. 5,14,465 in 1950-51 and Rs. 65,927 in 1955-56.

Kinds of permits.

Various permits were granted for possession, use etc. of foreign liquor, These were :—

Foreign liquor.

(1) *Emergency Permits* :—These permits were at first issued to families only, for emergent purposes. This permit can, since 22nd October, 1952, be issued in the name of any member of the family, but it cannot be granted to more than one member of a household at any one time. A holder of this permit is authorised to purchase and possess use or consume 6 2/3 ozs. of brandy, rum or 13 ⅓ ozs. of champagne during a period of six months. The number of emergency permits issued in 1955-56 was 279 and in 1956-57 180.

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Health Permits.

(2) *Health Permits* :—These permits are granted on grounds of health to the applicants after their medical examination by the Civil Surgeon, Surat, for a quantity recommended by him. The maximum quantity admissible under Bombay Foreign Liquor, Rules 1953, is 2 units*. During the year 1950-51 and from April 1951 to 19th September 1951, these permits were granted for a period of six months only. From 20th September 1951, these permits can be issued for a period of one year if recommended by the Medical Board, in the case of persons who are over sixty years and in the case of persons over seventy years the permits are granted without medical examination by the Medical Board. A permit-holder desiring to renew the permit has to make a fresh application. The number of health permits issued in 1955-56 was 509 and in 1956-57, 429.

Temporary Residents.

(3) *Temporary Resident's Permits* :—These permits are issued to person born and brought up or domiciled in a country outside Indian where liquor is usually consumed. Temporary resident's permits are granted for a maximum quantity of four units per month. They are granted up to the end of the financial year. A permit-holder desiring to renew the permit has to make a fresh application. The number of temporary resident's permits is sued in 1955-56 was 6, and in 1956-57, 10.

Visitors.

(4) *Visitor's Permits* :—Any person visiting the State of Gujarat for a period not more than a week is granted a visitor's permits up to a quantity of one unit and the permit is renewable for a maximum period of one month. The number of visitor's permits issued in 1955-56 was one, and in 1956-57 no such permits was issued.

Tourist

(5) *Tourist's Permits*:—Any foreign tourist who is eligible for a temporary resident's permits and possesses a tourist introduction card or tourist visa is grated a tourist permit for a maximum period of one month for a quantity of one unit per week.

Toddy.

TODDY:—Possession, use, etc., of toddy is completely prohibited.

Denatured spirit.

DENATURED SPIRIT :—permit for possession and use of denatured spirit up to a maximum quantity of two bottles per month are granted for domestic purposes.

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* One unit is equal to—

1 quart bottle of 26-2/3 ozs. of spirits, or

3 quart bottles of wine, or

9 quart bottles of fermented liquors of a strength exceeding 2 percent of alcohol by volume, or

27 quart bottles of fermented liquors of a strength not exceeding 2 percent of alcohol by volume.

COUNTRY LIQUOR AND WINE : Authorizations for the use of country liquor and wine for sacramental purposes only are granted to persons of certain communities, viz., Christains, Parsees and Jews.

Ganja, Bhang or Opium.

Ganja, bhang or opium is allowed to a person for his personal consumption only, under a permit which is granted on production of a medical certificate from the Medical Board, the maximum quantity allowed under a permit being 15 tolas in the case of ganja or bhang and 7½ tolas in the case of opium. In 1955-56, 210 permits were issued for opium, 20 for ganja and 9 for bhang. In 1956-57, the respective numbers were 148, 5 and 3.

There are also rules govering the possession, use, transport, sale, etc., of dangerous drugs, mhowra flowers, molasses, rectified spirit and absolute alcohol for industrial medical and similar purposes.

Neera.

The Bombay Village Industries Board is entrusted with the working of the "*neera* and palm products scheme". It is carrying out its *neera* and plam-gur work through co-operative societies or suitable institutions of constructive social workers such as (1) Gandhi Smarak Nidhi, (2) Sarvodaya Centres, and (3) Ashrams.

There is a supervisor stationed in each area of *neera* extraction who supervises the tapping and collection of *neera* from trees. The *neera* collected is transported to various sale centres. There is a manager at each centre, who supervises the sale with the help of the salesmen. The manufacture of *gur* from *neera* is allowed only at the *ban* (garden) under the supervision of the Ban Supervisor.

Prohibition Committees.

A Prohibition Sub-Committee consisting of ten members has been formed by the District Development Board, Surat. The Chairman of the Prohibition Sub-Committee is from the non-official members of the Board. The Superintendent of Prohibition & Excise is its Secretary. Functions of this committee are to advise the Prohibition & Excise Department in carriyng out the prohibition work and to make suggestions in matters pertaining to vigilance, prohibition propaganda, publicity, recreation activities, etc.

Sanskar Kendras.

There are 11 Sanskar Kendras in the district, and they are at (1) Salabatpura, (2) Sahara Gate, (3) Pal, (4) Vanz, (5) More-Bhagva, (6) Mandvi (7) Malekpore, (8) Vadoli, (9) Kolak, (10) Malwan and (11) Kachholi. Of these Sanskar Kendras, the first two are departmental and the remaining nine are subsidised Sanskar Kendras. The object of the Sanskar Kendras is to wean away drink addicts from drink by providing facilities to them for recreation.

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SOCIAL WELFARE Origin.

THE SOCIAL WELFARE DEPARTMENT

The Backward Class Department was created in 1931 as a result of the recommendations made in 1930 by the Depressed Classes and Aboriginal Tribes Committee. The classification recommended by the committee and adopted by Government includes within backward classes persons of three different categories, viz., (1) untouchables classed as scheduled "classes"; (2) aboriginal and hill tribes; and (3) such other classes of persons as Government may classify as "other backward classes". As soon as any caste or section of the population ceases to require protection or aid it may be removed from the list of backward classes and it will then cease to have any special connection with the Backward Class Department.

The communities under Scheduled Castes and Scheduled Tribes are approved by the President's order under the Constitution of India. The Constitution of India has also provided for special protection and encouragement to be given to the Scheduled Castes and Scheduled Tribes in view of their extremely backward condition. The population of backward classes in the District as per 1951 Census is as follows :—

Scheduled Castes	1,18,236
Scheduled Tribes	8,54,405
Other Backward Classes	2,86,459
Total ...	12,59,100

It is the policy of Government to push on vigorously with the work of amelioration of backward classes so that the communities at present classified as backward may be assimilated into society on a common footing with others and they may make rapid progress in economic, social, cultural and other spheres, and conditions may be created in which they will cease to be backward.

The Central Government also gives liberal grants for this purpose under Article 275 of the Constitution.

Organisation.

With the inauguration of the new Bombay State, a new Department of Labour and Social Welfare has been created which looks after the amelioration of backward classes. In addition to a separate Secretary, a post of Deputy Secretary has also been created in this Department. The head of the Department, called Director of Backward class Welfare, has his head quarters at Poona. He is assisted by a Personal Assistant of the rank of Assistant Director of Backward Class Welfare. In addition, there are three Assistant Directors all at the head quarters, one in charge of Education, another of Lands and the third of Economic Matters respectively. The posts are filled by transfer of suitable Class

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I or Class II officers of the Departments of Education, Co-operation and Revenue. There are also 23 Backward Class Welfare Officers in the old Bombay State area, each in charge of a single district. These officers are of the status of the second grade Mamlatdars. There are also two regional Nomadic Tribes Welfare Officers, one for Mahashtra and the other for Gujarat, appointed specially for the welfare of nomadic tribes. They are of the status of Backward Class Welfare Officers. The Department is not ordinarily entrusted with executive work, as its main function is co-ordination of the work of other Departments concerned wtih backward class welfare work. The execution of a programme in any particular field is the responsibility of the department concerned with that field and its officers. The Director of Backward ClassWelfare seeks to co-ordinate the work of the various departments in accordance with the directives of Government and the relevant provisions of the Constitution and collects such information and statistics from the departments as are required by Government. With the formation of the new State of Gujarat, the directorate of Labour and Social Welfare of the former Bombay State was split up into two, viz., Labour Welfare headed by the Commissioner of Labour Welfare and Social Welfare headed by the Director of Social Welfare who deals with the amelioration of the condition of the Scheduled Castes, Scheduled Tribes, *Vimukta jaties* and nomadic and semi-nomadic tribes including other backward classes.

Measures of uplift.

EDUCATION.

The uplift of backward classes is sought to be achieved in many ways. First of all, special facilities are given to them for receiving education. For example, they get free studentships in Government as well as non-Government schools, and scholarships in arts and professional colleges and technical institutions. In addition, the Social Welfare Department gives monetary help to poor and deserving students from backward classes studying in secondary, collegiate, and technical institutions, by way of lump sum grants for the purchase of slates, books, tools, etc., and for payment of examination fees. A percentage is prescribed by Government for the admission to training institutions of men teachers from backward classes. In the case of women teachers, no percentage has been separately fixed, but if suitable women belonging to these classes are available for training, preference is given to them in the matter of admission to training colleges.

HOSTELS.

Voluntary agencies are encouraged by means of grants-in-aid to open special hostels for backward classes. There are 22 such hostels in the Surat district run by the following voluntary agencies :—

Name of the Voluntary Agency.	Hostel conducted.
1. Managing Committee of Sarvodaya Chhatralaya,	Shri Sarvodaya Chhatralaya, Surat.
2. Mandvi Education Society Mandvi.	Backward Class Hostel for Boys, Mandvi.

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Name of Voluntary Agencies	Hostel conducted.
3. Raniparaj Sewa Sabha Swaraj Ashram, Vedchhi.	1. Bapu Kumar Ashram, Ghantoli. 2. Bapu Kanya Ashram, Ghantoli. 3. Kanya Ashram, Madhi. 4. Kumar Chhatralaya, Vedchhi. 5. Kanya Chhatralaya, Puna. 6. Kasturba Kanya Ashram, Bedkuwadur. 7. Sardar Kumar Ashram, Dharampur. 8. Kasturba Kanya Ashram, Sherimal. 9. Kasturba Kanya Chhatralaya, Isanpur.
4. Surat District Harijan Sevak Sangh, Surat.	Sarvodaya Chhatralaya, Bilimora.
5. Gram Seva Samiti, Kachholi.	Kanya Sanskar Mandir, Kachholi.
6. Gujarat Harijan Sevak Sangh, Ahmedabad.	Shri Sardar Chhatralaya, Bardoli.
7. Gujarat Harijan Sevak Sangh, Ahmedabad.	Shri Thakar Bappa Chhatralaya, Navsari.
8. Gujarat Harijan Sevak Sangh, Ahmedabad.	Halpati Chhatralaya, Navsari.
9. Bhagini Samaj, Bombay.	Naniben Mehta Pachhat Kom Kanya Chhatralaya, Udwada.
10. Jai Gandhi Sarvodaya Shikshan Sangh, Kosamba.	Sarvodaya Chhatralaya, Kosamba.
11. Sarvodaya Melavani Sahakari Mandal, Kathor.	Mahatma Gandhi Sarvodaya Chhatralaya, Kathor.
12. Shramjivi Sanskar Sabha, Balwada.	Shramjivi Chhatralaya, Balwada.
13. Gujarat Harijan Sevak Sangh, Ahmedabad.	Vallabha Kanya Ashram, Verad.
14. Gujarat Harijan Sevak Sangh, Ahmedabad.	Kasturba Kanya Chhatralaya, Bhinar.

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Voluntary Agencies.

Voluntary agencies are also encouraged to open and run *balwadis* for backward class children of tender age to teach them habits of cleanliness and ultimately to achieve their assimilation with other higher caste Hindu children. To solve effectively the problem of education of backward classes, voluntary agencies are encouraged to open *sanskar kendras* for Scheduled Castes, *ashram* schools for Scheduled Tribes and *ashram* schools cum-*sanskar kendras* for ex-criminal tribes.

Sanskar Kendras are conducted in the state and grants are paid to the voluntary agencies conducting them. There is only one Sanskar Kendra in the Surat district, *viz*., Sanskar Kendra at Saidepur conducted by Shri Meghwal Hitwardhak Mandal, Saidepur.

Four *ashram* schools are located in the Surat district, as the district is thickly inhabited by Scheduled Tribes. The total number of *ashram* scools-cum *sanskar kendras* in the Bombay State as on 31st March, 1957 was five.

Secondly, reservation of posts is made for members of the backward classes in the public services. The following percentages of vacancies are reserved for members of the Scheduled Castes, Scheduled Tribes and other Backward Classes, in Class III and Class IV services and posts.

Service or post.	Percentage of vacancies reserved.		
	Scheduled Castes	Scheduled Tribes	Other Backward Classes
Class III	6	7	9
Class IV	7	9	11

There is a collective reservation of vacancies in respect of the State (Gazetted) Services, *viz*., 12½ per cent. in respect of the backward classes as a whole. The above percentages represent the minimum number of vacancies to be filled in by the appointment of members of backward classes but it is open to the appointing authorities to recruit members of backward classes in excess of these percentages, if they are otherwise considered suitable for such appointments *vis-a-vis* other candidates. Similar percentages are prescribed for recruitment of backward classes in the services of local bodies and institutions receiving Government grants-in-aid. Different percentages varying from 15 to 45 have been prescribed for appointment of members of backward classes as primary school teachers in the various districts in the State.

The maximum age limit prescribed for appointment to Class III and IV services and posts under the relevant recruitment rules

have been relaxed by five years, instead of three years as before, in favour of candidates belonging to backward classes.

Thirdly, special attention is devoted to provision of housing accommodation for backward classes. The Social Welfare Department helps in providing housing sites for members of the scheduled classes by acquiring lands and disposing of the plots to individual members at a nominal occupancy price fixed in consultation with the Collector of the district.

The Post-War Reconstruction scheme No. 219 sanctioned by Government during 1948-49, has been sanctioned as one of the schemes under the second Five Year Plan. The scheme envisages grant of financial assistance to backward class families in the State to build their own houses through co-operative housing societies etc. Under the scheme loans are granted to housing societies of backward class persons upto an amount not exceeding 75 per cent. of the estimated cost of houses, which is taken to be anywhere between Rs. 3,000 and Rs. 4,000 in industrial areas like Ahmedabad, Rs. 2,000 in places having district or borough municipalities, and in other areas, the estimated cost is fixed at Rs. 800, Rs. 1,000 and Rs. 1,500 as the case may be. The loan is free of interest and is made repayable in 25 annual instelments. If a member of such a society is engaged in agricultural pursuits, an additional loan not exceeding 60 per cent of the cost of a shed and barn estimated at not more than Rs. 100 is also made available to such a member for construction of a shed and barn. Subsidies are also granted to such societies to meet their cost of management etc. at the rate of Rs. 10 per tenement for the first two years, and, later on, at the rate of Rs. 5 per tenement, till the entire Government loan is repaid. These societies are also granted, for housing sites, Government lands free of cost or, where Government lands are not available, Government subsidy equal to the cost of acquisition of private lands is made available to them. In industrial areas of Ahmedabad, 2½ gunthas of land are made available to a non-agricultural member and 1½ gunthas in other areas. Agricultural members get 3 gunthas each, in all the areas. The value limit of land is fixed at Rs. 5 per sq. yd. for the four industrial cities. In other areas, the land should be of the value current in lower middle class localities, and the excess costs, if any, should be borne by the societies.

This scheme has undergone certain revision, in as much as the concessions provided under this scheme are now restricted to societies of scheduled castes, scheduled tribes and ex-criminal tribes only, so far as new organisations registered after the 14th August, 1953 are concerned. Housing Societies of other backward classes registered after 14th August, 1953 are eligible for concessions under the scheme only in genuine cases of hardship and with the special approval of Government. Such societies are however, eligible for Government lands where available, in all cases.

Fourthly, the economic regeneration of the backward classes is promoted by various steps. With a view to improving the technique of the hereditary occupations of these classes, Government have sanctioned a number of peripatetic parties (15 on 31st March, 1957) for imparting training to artisans and their children in various industrial subjects. Out of these, two are for Surat District. Stipends are granted to students admitted to the schools. Backward Class students are also awarded scholarships for taking industrial training at the various technical and industrial institutions.

Other measures

There are various other measures adopted by Government for the economic uplift of backward classes. The chief among them are :—

(*a*) Grant of cultivable waste lands to backward classes.

(*b*) Grant of forest lands to backward classes on agri-silvi system.

(*c*) Grant of tagai loans.

(*d*) Provision of special concessions to backward classes in respect of removal of timber, minor forest produce, cutting of fuel, etc.

(*e*) Grant of financial assistance for the formation of backward class co-operative farming societies.

(*f*) Grant of forest coupes to backward class forest labourers' co-operative societies at an upset price.

Special attention has also been devoted by the Government to the welfare of nomadic tribes and semi-nomadic tribes. Among backward classes the nomadic and semi-nomadic communities are perhaps the most backward who could not take benefits of several schemes. As these communities have no settled way of life, and they go from place to place in search of a living and are steeped in illiteracy and poverty they have not been able to take such advantage of the various schemes implemented by Government for the welfare of backward classes. Government have included special schemes in the Second Five Year Plan for the uplift of nomadic tribes and semi-nomadic tribes. Special schemes such as loans to nomadic tribe persons for hawking business and amelioration of nomadic tribe women by imparting training in crafts have been included besides the usual schemes *viz*.. the opening of *ashram* schools, *balwadis*, and *sanskar kendras* ; free supply of books and slates ; provisions of hostel facilities ; starting of industrial training centres ; grant of financial assistance to labour contract societies and co-operative housing societies ; appointment of propaganda workers ; digging of wells, etc. ; and grant of loans and subsidies to hereditary and trained artisans.

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Welfare Department.

SOCIAL WELFARE

Fifthly, measures had been taken to ensure the social uplift of the backward classes, especially Harijans. The Bombay Harijan (Removal of Social Disabilities) Act (of 1947) and the Bombay Harijan Temple Entry Act (XXXV of 1947) had been enacted with a view to bringing about complete removal of untouchability as far as public and civic rights were concerned. However, with the enactment of an All-India Act, known as "The Untouchability (Offences) Act, 1955", the Bombay Harijan Acts referred to above were repealed with effect from 8th May, 1955. The Bombay Devadasis Protection Act (X of 1934) has declared unlawful the performance of any ceremony having the effect of dedicating girls as devadasis. These unfortunate girls were usually members of the backward classses.

In addition, Government enforce laws, such as the Bombay Tenancy and Agricultural Lands Act, 1948, and the Bombay Agricultural Debtors' Relief Act. These Acts are of general application and are intended to safegaurd the rights of agricultural tenants, to grant them privileges, and to provide relief to agricultural debtors. The backward class agriculturists, a large number of whom are tenants and agricultural debtors, can receive the benefits of these laws in the same manner as other tenants and agricultural debtors. In addition, officers of the Social Welfare Department, in the normal course of their duties, help the backward class agriculturists to secure the relief available to them under these Acts.

The Social Welfare Department has to see that the policy of Government is fully implemented in day to day administration.

To advise the Social Welfare Department in regard to its activities in the district there is a special Backward Class Sub-Committee of the District Development Board for the district. Its constitution and functions are as follows :—

The Vice-Chairman of the District Development Board, who is a non-official nominated by Government, is to act as the Chairman of the sub-committee of the Board. The Social Welfare Officer of the district is the secretary of the sub-committee relating to the work of amelioration of backward classes. The functions of the sub-committee are :—

(*a*) To provide information regarding the grievances and needs of the backward classes.

(*b*) To form a channel of communication between the Director of Social Welfare and the backward classes.

(*c*) To give their opinions on questions referred to them by the Social Welfare Board or the Director of Social Welfare.

(d) To help backward classes by bringing their needs and grievances to the notice of the local officers concerned.

(e) To take suitable measures for the removal of untouchability and other disabilities and removal of harmful social customs among the verious baekward classes.

(f) To carry on propaganda work as far as possible among the backward classes.

Harijan Sevak Sangh.

In addition to the work of ameliorating the condition of backward classes through the Government channel, voluntary agencies engaged in the task of amelioration of backward classes are given every possible encouragement. Several voluntary agencies, with are pioneers in this field, are recognised and given suitable grants-in-aid in the light of their activities. The main activity of these voluntary agencies is propaganda with a view to apprise the backward classes of the civic rights and privileges provided by Government for them, and also of the directives issued by Government for the amelioration of their condition. This propaganda is carried out by workers appointed by the volnntary agencies. Maintenance of hostels, establishment of Ashram Schools, Balwadis, Sanskar Kendras are the other important activities sponsored by Government and undertaken by tne voluntary agencies with Government aid. in Surat district there are five propaganda workers for the Scheduled Tribes.

CHARITY COMMISSIONER
BOMBAY PUBLIC TRUSTS ACT.

The chief voluntary agency in the Surat district is the Gujarat Harijan Sevak Sangh, Ahmedabad. This agency was paid grants-in-aid to the tune of Rs. 29,324 during the year 1956-57. The Bharatiya Depressed Classes League, Bombay State, Bombay, and Raniparaj Seva Sabha, Vedchhi are also working in the district.

THE CHARITY COMMISSIONER

Prior to 1950. the religious and charitable trusts in the State were governed by various enactments,Central as well as Provincial based on religion. In 1950, a compasite legislation called the Bombay Public Trust Act (XXIX) of 1950, was passed, which can be made applicable to all public trusts without distinction of religion. This Act defines "Public trusts" as "an express or constructive trust for either a public religious or charitable purpose os both, and includes a temple, a math, a waks, a dharmda or any religious or charitable endowment and a society formed either for a religious or charitable purpose or fof both and registered under the Societies Registration Act (XXI) of 1860.

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trust is valid without the previous sanction of the Charity Commissioner. The trustee of a public trust is bound to invest the surplus funds of the trust in public securities or first mortgage of immoveable property on certain conditions. For making an investment in any other form, the permission of the Charity Commissioner must be obtained.

Application of Funds.

If the original object of a public trust fails wholly or partially if there is surplus income or balance not likely to be utilised, if in the case of a public trust other than a trust for a religious purpose, it is not in the public interest expedient, practicable desirable, necessary or proper to carry out, wholly or partially, the original intention of the author of the public trust or the object for which the public trust was created, an application can be made to the District Court or City Civil Court, Ahmedabad, as the case may be, for application cypres of the property or income of the public trust or any of its portion.

If there is a breach of trust or a declaration is necessary that a particular property is the property of a public trust, or a direction is required to recover the possession of such property, or a direction is required for the administration of any public trust, two or more persons having an interest in the trust or the Charity Commissioner can file a suit in the District Court or City Civil Court, Ahmedabad, as the case may be, to obtain reliefs mentioned in the Act. If the Charity Commissioner refuses consent, an appeal lies to the Bombay Revenue Tribunal constituted under the Bombay Revenue Tribunal Act (XII of 1939). The Charity Commissioner can also file such a suit on his own motion.

"The Charity Commissioner may, with his consent, be appointed a trustee of a public trust except of a public trust created for a religious purpose, by a Court or by the author of a trust, provided his appointment is made as a sole trustee. In regard to the public trusts created for religious purposes, while the courts are not competent to appoint the Charity Commissioner to be a trustee of sucha trust, if the author of a public trust for a religious purpose expresses his intention, or the person or the authority in whom the property of such public trust vests, deems it expedient in public, interest, the court may appoint the Charity Commissioner with his consent to be the sole trustee of such public trust. The Charity Commissioner is, however, precluded from accepting the trusteeship of a public trust for religious purposes which involves the exercise by him as trustee of any religious observance or ceremony or the decision of any qusestion as to the religious mint or character of any individual or institution."

Registration

Inquiries regarding the registration of a public trust or regarding the loss caused to a public trust or public trusts registered under the previous Acts, in consequence of the act or conduct of a trustee or any other person, have to be conducted with the

aid of assessors not less than three and not more than five in number. The assessors have to be selected, as far as possible, from the religious denomination of the public trust to which the inquiry relates.

The presence of assessors, can, however, be dispensed with in inquiries where there is no contest. A list of assessors has to be prepared and published in the Official Gazette every three years. Districtwise lists of assessors have already been prepared and published in the Gujarat Government Gazette.

Charities under Charitable Endowments Act, 1890

The Charity Commissioner is deemed to be and to have always been the Treasurer of Charitable Endowments for the State of Gujarat, appointed under the provisions of the Charitable Endowments Act, 1890.

Publication issued by the Charity Commissioner

The Charity Organisation has undertaken the publication of district directories of public trusts, and abstract of accounts of public trusts. The former contains the names, addresses, etc. of the public trusts, their objects, assets, institutions run by them and average annual income and average annual expenditure on religious and charitable objects. The latter publication contains information, in respect of public trusts having an annual income of more than Rs. 1,000.

The Directory of public trusts in Surat district for the period up to 31st March, 1955 has been published. Similarly the Abstract of Accounts giving the financial position of public trusts during the year 1953 has also been published.

Duties under the socities registration Act, 1860.

"The work relating to the Societies Registration Act, 1860, which was done by the Registrar of Companies, Bombay, has been transferred to the Charity Organisation from the 1st July, 1956 and the Assistant Charity Commissioner, Baroda has been appointed as Assistant Registrar of Societies for the territories comprising the Baroda Region with effect from that date."

COMMUNITY PROJECT AND NATIONAL EXTENSION SERVICE

COMMUNITY PROJECTS AND NATIONAL EXTENSION SERVICE

ORIGIN.

In their First Five Year Plan (1951-56), the Planning Commission of the Government of India proposed organisation of Community Development Projects and National Extension Service to initiate a process of improvement of social and economic life in the villages. These were implemented by the Union and the State Governments in co-operation. The principal aim was to mobilise local dormant man-power for a concerted and co-ordinated effort at raising the level of rural life as a whole. Both the National Extension Service and the Community Development Programmes envisage development in the fields of agriculture, animal husbandry, public health, social education, co-operation,

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COMMUNITY PROJECTS AND NATIONAL EXTENSION SERVICE

communications etc., in selected areas. In the areas of Community Development Projects Blocks, constructional programme was more intensive then in the National Extension Service areas. In the latter, the main objective was to bring about administrative re-organisation.

Plan

Each 'block' whether of the Community Development or National Extension Service category, covered a population of approximately 66,000. The budget provided for a community Development "block" was 15 lakhs of rupees for a period of three years, while the cost of a National Extension Service block was only half of this, *viz.*, 7½ lakhs of rupees. National Extension Service blocks were intended to spread over the whole country by the end of the Second Five Year Plan and approximately half the number of these blocks, on the basis of their performance were to be converted into Community Development Blocks. For the first three years the State Governments were to receive substantial financial help from the Central Government After the first three years the financial liability for maintaining the development achieved in the selected area was to devolve mainly upon the State Government.

Administrative Machinery

Special administrative machinery had been set up at the headquarters of the State Governments and at lower levels to avoid delay and departmental routine. In the Bombay State the Development Commissioner, who was also the Chief Secretary to Government, was made responsible for the control and supervision of the programme. The Development Commissioner was assisted by an additional Development Commissioner. A Committee known as the State Development Committee, consisting of the Chief Minister (as Chairman) and Ministers in charge of Finance, Public Works, Revenue and Agriculture, Forests and Co-operation, was also set up. The Chief Secretary and Secretaries, Finance, Revenue, Agriculture and Public Works Departments were also members of this committee. The functions of the State Committee were to lay down broad policies and provide general supervision in respect of the implementation of the programme.

In the case of a Community Development Block, the Prant Officer (Assistant or Deputy Collector), in whose charge the block area fell, was appointed ex-officio Project Officer for the development and economy in expenditure. The Project Officer, by virtue of his position as a Revenue Officer, was in a position to exert considerable healthy influence upon the villages in their endeavour for social and economic development.

At the district and taluka levels, Committees known as 'District Community Development National Extension Service Advisory Committee and Taluka Community Development/National Extension Service Advisory Committee' were set up to look after and tender advice in connection with the working of the

programme. The Committees consisted of both officials connected with the programme as also non-officials. To aid and advise the Prant-*cum*-Project Officers in the task of all round development, subject matter specialists like Agricultural Officers, Assistant District Co-operative Officers, Social Education Organisers, Deputy Engineers, Overseers, etc., were appointed. Considerable delegation of powers was made to Collectors, Prant-*cum*-Project Officers etc., by way of decentralisation of powers which avoided departmental routine and delay in the execution of the programme.

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Gramsevaks.

The lowest but the most important link in the chain of the administrative machinery devised for this development programme was the *Gram Scvaks* who woked in close contact with the villagers. A new cadre of *Gram Sevaks* was formed by pooling the existing personnel, of the Revenue, Co-operative and Agriculture Departments, working at the level of group of villages in the block area. On appointment these *Gram Sevaks* performed revenue as well as extension duties. They were Circle Inspectors, Agricultural Assistants and Co-operative Supervisors, all in one. The talathis in charge of villages were designated as Assistant *Gram Sevaks*. The functions which the village level worker was to perform were of very great importance. He had to understand rural problems and the psychology of the farmer and offer solutions to his various difficulties. He had to try and find out the felt needs of the people and the solutions that he offered were to be demonstrated by working in close co-operation with the farmers. His success depended on the extent to which he gained the confidence of the farmers.

The various Administrative Departments and Heads of Departments were directed to assign very high priority to matters relating to project works. In the District, the Collector as the Chairman of the Advisory Committee, is also expected to bring about proper co-ordination in the work of the various development departments functioning in the project area.

The aim of the programme is community development and it can only take place when people themselves evince a keen interest in the programme. To this end people were sought to be associated as much as is possible with the planning of development schemes and their execution. While schemes involving large expenditure and requiring a high degree of technical skill were to be executed departmentally, other schemes were to be excuted with as much co-operation as was possible from local agencies such as the District Local Boards, village panchayats, etc., or, in the last resort, by *ad hoc* committees formed of representatives of the villagers.

Association of people.

To ensure people's participation in the development programme it has been laid down that various schemes, or works are to be taken up on the basis of public contribution. The Collectors and Project Officers approved schemes only when minimum popular contributions were forthcoming. There was no limit to the maximum popular contributions which could even be cent per cent. The scales of minimum popular contributions varied according to the nature of the schemes. Contributions were

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either in cash or labour or materials. For schemes of irrigation the minimum contribution fixed was 33 per cent ; for potable water wells 25 per cent ; for roads 33 per cent ; for school buildings 33 per cent ; for dispensaries or hospitals 25 per cent ; of capital cost ; and for community recreation centres and library buildings 50 per cent of capital cost.

In Surat district, a national extension service block was started in Songadh taluka on January, 26, 1954. It was converted into a community development block from May, 1st, 1955. Two National Extension Service blocks were started in Navsari taluka from October, 2, 1954 and they were converted into a community development block from October, 2, 1957. A three-fourths national extension service block was started in Palsana mahal from April, 1, 1956, two national extension service blocks were started in Chikhali taluka from October,2,1956 and one in Bansda taluka from April, 1, 1957. A special multipurpose project in 39 villages was started in Dharampur taluka as one block from April, 1, 1957 and another national extension service block from October, 2, 1957 except in the 39 villages mentioned before. A 1.25 national extension service block was started in Mangrol taluka from April 1, 1958, thus making a total of ten blocks.

Public Cotributions

In songadh, Bansda, Dharampur and Mangrol talukas, the people are very poor backward class *adivasis*, and they had to pay only 20 per cent popular contribution either in cash or kind. The budget grant and the period of the block were different from those in other blocks in the special multipurpose project scheme introduced in the 39 villages of Dharampur. The total budget grant, to be utilised within a period of five years for all the ten blocks is Rs. 27 lakhs.

CHAPTER 18—MISCELLANEOUS DEPARTMENTS

THE TOWN PLANNING AND VALUATION

TOWN PLANNING AND VALUATION

Organisation

THE STATE HAS A SEPARATE Town Planning and Valuation Unit which deals principally with the subjects of "Town Planning" and "Valuation of Real Properties". It also advises Government on matters relating to slum clearance, housing, etc. including legislation.

The department was established in 1914 with the Consulting Surveyor to Government as its head. The Bombay Town Planning Act 1915 was passed in the next year providing for the preparation of statutory town planning schemes in respect of areas in course of development within the jurisdiction of local authorities. Under this Act the local authorities are both initiating and executing authorities and the functions of the department are of an advisory nature. Very few local authorities have, however, the trained staff required for the preparation of statutory town planning schemes, and therefore usually an assistant from the department is deputed to prepare schemes for them. About 125 statutory town planning schemes have so far been undertaken by the local authorities at various places in the State, of which 46 have been finally sanctioned and come into force.

The provisions of the Bombay Town Planning Act enable the planner to ignore to a great extent existing plot boundaries. In designing his layouts existing holdings can be reconstituted and made subservient to the plan, and building plots of good shape and frontage can be allotted to owners of land ill-shaped for building purposes and without access. The cost of the scheme can be recovered from the owners benefited to the extent of 50 per cent. of the increase in the value of the land estimated to accrue by the carrying out of the works contemplated in the scheme. When a draft scheme prepared by a local authority in consultation with the owners is sanctioned by Government an Arbitrator is appointed. His duties are to hear each owner individually, consider his objections or proposals and make suitable adjustments or amendments in the draft scheme proposals, if found necessary. The department also provides the necessary Arbitrator. The department issues certificates of tenure and title in respect of the plots after a scheme is finally sanctioned. Preparation and scrutiny of layouts of co-operative housing societies, when they apply for loans from Government, are other duties of the department. The Consulting Surveyor is often called upon to give advise on or to prepare

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TOWN PLANNING AND VALUATION

layouts of Government, municipal or private lands for purposes of town extension.

In addition to the statutory town planning schemes the department prepared Master Plans for 27 towns under the first Five Year Plan Programme. These master plans were prepared only under departmental orders and had no statutory backing. It was experienced that without legal sanction it was difficult to implement them. The law relating to town planing was, therefore, consolidated and amended by the Town Planning Act (XVII of 1954) which has come into force from 1st April, 1957. The new Act makes it obligatory upon every local authority (except village panchayat) to prepare a Development Plan* for the entire area within its jurisdiction. The local authorities who have been given powers to implement the proposals in these plans, may, for the purpose make one or more town planning schemes for the whole area within its jurisdiction or any part thereof.

In land acquisition cases the Consulting Surveyor to Government has to render expert advise to Government in matters of valuation and in cases where the claimants go in for court references on the awards of the Land Acquisition Officers. He also gives expert evidence in the court in such references. His department is also entrusted with the fixation and revision of standard rates of non-agricultural assessment. He is also called upon to fix the rateable value of Government properties within the limits of borough municipalities for determination of municipal assessment. When Government has to sell, lease or purchase land, the department is consulted as regards the price and rent.

The revenue officers of Government are sent to this Department for training in the board principles of village planning, valuation, fixation of non-agricultural assessment, rural development, etc. Lectures on Town Planning are given by the officers of the department at the Centres of the Local Self-Government Institute at Poona and Baroda.

* Section 7 of the Act lays down :—

"A development plan shall generally indicate the manner in which the development and improvement of the entire area within the jurisdiction of the local authority are to be carried out and regulated. In particular it shall contain the following proposals, namely :—

(a) proposals for designating the use of the land for the purposes such as (1) residential, (2) industrial, (3) commercial, and (4) agricultural .

(b) proposals for designation of land for public purposes such as parks, playgrounds, recreation grounds, open spaces, schools, markets or medical public health or physical culture institutions ;

(c) proposals for roads and highways ;

(d) proposals for the reservation of land for the purposes of the Union, any State, any local authority or any other authority established by law in India ; and

(e) Such other proposals for public or other purposes as may from time to time be approved by a local authority or directed by the State Government in this behalf. ."

TOWN PLANNING AND VALUATION

Recoveries are made from local authorities and private persons who avail themselves of the services of the Consulting Surveyor or of his officers in the preparation of town planning schemes, layouts, etc., and also for the performance of the duties as an Arbitrator in town planning schemes.

From a small beginning in 1914, when the activities o the department were mainly restricted to the suburbs of Bombay and other big towns such as Poona, Ahmedabd, Sholapur, etc. the Department has developed considerably. In addition to the Head Office at Poona there were five more branch offices at Bombay, Ahmedabad, Kalyan, Kolhapur and Baroda, in the area of the erstwhile Bombay State, and three more at Nagpur, Amravati and Aurangabad were added after the coming into being of the new Bombay State in November, 1956.

There is no branch office of this Department in Surat District. The Surat Municipality has prepared two town planning schemes which have been entrusted to the Deputy Assistant Consulting Surveyor to Government, Baroda, for arbitration, which is now (August 1957) in progress. The outstanding work done in this district is the preparation of a Master Plan for Surat Town. The Master Plan together with a detailed report explaining the proposals thereof has been supplied to the local authority and the Collector of Surat for implementing the proposals thereof according to the availability of funds with the local authority for the purpose. Under the provisions of the Bombay Town Planning Act, 1954, a concession has been granted to those local authorities, for whose areas Master Plans have already been prepared, to submit such plans to Government as Development Plans for sanction, provided they do so within a period of six months from the coming into force of the Act. The Surat Municipality has been moved to take necessary action in the matter accordingly.

THE DIRECTORATE OF INFORMATION.

DIRECTORATE OF INFORMATION

DISTRICT INFORMATION OFFICER

As in other districts, the Surat district has got District Information Office at Surat. In addition, as Surat is a very large district, one more van is temporarily posted at Navsari as an experiment. The Mobile Publicity Vans fitted up with 16 mm cinema projection equipments have been placed in charge of District Information Officers. These District Information Officers tour the villages of the district and provide free film programmes for the benefit of the villages. The films exhibited are mostly documentaries imparting instruction in subject related to rural life such as agriculture, health, citizenship, village industries, etc. The films have also entertainment value. The District Information Officers also deliver lectures to the village people explaining

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Government policies and programmes. They keep in close personal contact with the people of the district and arrange for the dissemination of news and information sent to them among the people by direct contact. These two officers are under the supervision of the Regional Information Officers.

Besides these the Directorate has, in Surat district, one Information Centre under the supervision of the District Publicity Officer, Surat. The centre is fully equipped with charts, models, exhibits, etc. and serves as a useful medium of explaining to the people of the district, the development and progress of various schemes and projects undertaken by the Government.

Rural Broadcasting

There is also a Rural Broadcasting District Head-quarters at Surat under which there are at present about 84 radio sets installed at various receiving centres in Surat district under the Contributory Scheme of Community Listening.

A Technical Assistant who is in charge of the Rural Broadcasting District Head-quarters at Surat is assisted by a mechanic and two battery peons in carrying out the installation and maintenance work of the radio sets installed in villages under jurisdiction.

Regular periodical visits are paid to all the receiving centres to replace the batteries and to attend to whatever complaints there may be, regarding the working of the radio sets.

The Rural Broadcasting District Head-quarters at Surat is equipped with radio servicing and battery charging equipment, testing instruments and tools for the purpose of servicing and repairing radio receiving equipment and charging of batteries. etc.

A Rural Broadcasting Van is also stationed at Surat Headquarters for the purpose of installation and maintenance of radio sets in the district.

ADMINISTRATION OF MANAGED ESTATES IN SURAT DISTRICT.

MANAGED ESTATES

On many occasions Government takes over the administration of estates of minors, lunatics and persons incapable of managing their own property. There are two pieces of legislation in operation in the Surat district which govern such administration. One is the Bombay Court of Wards Act (I of 1905) and the other, the Guardian and Wards Act (VIII of 1890). The idea in Government administering the estates of minors and lunaties is to secure proper care and managment of the estates concerned. In the case of persons incapable of managing their own property, assumption of superintendence of the estate is undertaken only when the estate is encumbered with debt or mismanaged or has no one capable of taking proper care

of it, and Government is of opinion that it is expedient in the public interest to preserve the property of the person for the benefit of his family and the property is of such value that economical management by the Government agency is practicable.

Court of Wards Act

Under the Bombay Court of Wards Act, the collector of Surat is the Court of Wards for the limits of his district. The State Government has, however, powers to appoint, in lieu of the Collector, either a special officer or a board consisting of two or more officers to be the court of wards. Delegation of the powers of the court of wards to the Collector, Assistant or Deputy Collector is provided for. The court of wards is empowered, with the previous sanction of the State Government, to assume the superintendence of the property of any land holder or of any person holder who is "disqualified to manage his own property". Those who are deemed to be disqualified are (*a*) minors (*b*) females declared by the District Court to be unfit to manage their own property ; (*c*) persons declared by the District Court to be incapable of managing or unfit to manage their own property and (*d*) persons adjudged by a competent Civil Court to be of unsound mind and incapable of managing their affairs. The court of wards cannot, however, assume superintendence of the property of any minor for the management of whose property a guardian has been appointed by will or other instrument or under section 7(1) of the Guardian and Wards Act.

In the Surat District, the Collector of Surat himself acts as a Court of Wards, as the estates are very few. During the year 1955-56 there were five estates in management under the Bombay Court of Wards Act. Their financial position was as under :—

Total recurring income	Rs. 13,174
Net income	Rs. 13,127
Total recurring expenditure ...	Rs. 8,031

When management of private estates is assumed, the costs of management is made recoverable from the estates.

Guardian and Wards Act

The Indian Act, i. e. the Guardians and Wards Act, 1890, applies to the estates of minors much the same as provisions as those of the Bombay Court of Wards Act. Under the Indian Act, the district court appoints a guardian who may be an officer of the Court, a relative of the ward or the Collector.

In 1953, there were no estates under the guardianship of the Collector of Surat under the Indian Act. Such estates were managed by the Deputy Nazir under the supervision of the District Judge, Surat.

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MANAGED ESTATES

As per Government Resolution, Revenue Department No. 2521/49, dated 4th September, 1953 this work has been transferred from the district court to the Collector. The District Judge, Surat, on 16th December, 1953 has appointed the Collector of Surat as the guardian of the properties of minor's estates which were under the management of the Deputy Nazir. In view of the said order, the Collector has taken over the charge of the minor's estates from the Deputy Nazir. The powers of the Collector have been delegated to the Personal Assistant to the Collector.

In the year 1955-56 there were 32 estates under management under the Guardians and Wards Act. Their financial position was as under :—

Total recurring income	Rs. 37,527
Net income	Rs. 20,658
Total recurring expenditure ...	Rs. 16,602
Total cost of management ...	Rs. 3 750

CHAPTER 19—VOLUNTARY SOCIAL SERVICE ORGANIZATIONS

Origin, Growth and Direction

THE TRADITION OF SOCIAL SERVICE HAS BEEN very old in the city and district of Surat. Caste organizations with their recognized leaders played a prominent and useful role in initiating and supervising activities which would prove beneficial to their respective communities. These *mahajans* of the Hindu communities along with the *kaji* of the Muslim community and the chief *dastnrji* of the Parsi community had the privilege of being invited to the *darbars* of the nababs and were the channel of communication through which complaints and grievances against Government could be conveyed to the rulers and redress sought from the latter. Very often, there was also the *nagarsheth* a kind of sheriff, who was recognized more or less as a leader of the city and was expected to devote at least some of his time and energy to the service of the people.

Institutionalized social service is, however, a modern phenomenon, and its beginnings in Surat can be traced to the earliest days of British rule. As early as 1817 the London Missionary Society established an English School in the city and six years later in 1823 established four primary schools. These schools were later on transferred to the Irish Presbyterian Mission which founded the first full-fledged High School —the I. P. Mission High School—in 1840. A girls' school was started in 1846. The establishment of boarding houses for orphans and destitute children and *zanana* schools for women in *purdah* were other activities of these missionaries later in the century.

The urge to establish educational institutions was, however, only one aspect of that wider zeal, sometimes conscious, sometimes not so conscious, which inspired the effort at many-sided national advancement. The heroic attempt of Durgaram Mehta (1809-1878) to establish a girls' school, afterwards named as Premchand Raychand Girls' School, in the very orthodox atmosphere of 1852 was as much a bold adventure in social reform as a step to provide educational facilities for girls. The impact of western ideas was making itself felt on thinking minds and expression began to be given in various ways to the general impulse towards progress. Bejanji Palanji Kotwal (1807-50) started the Temperance Association in 1845 ; it had a monthly organ called '*Surat na Parhejgar*'. He also was the first to start a bi-weekly paper *Suratna Samachar*, the first issue of which came out on 10-10-1850. The famous

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poet Narmad (1833-86) read in 1851 his first essay on advantages of establishing social service institutions. Even before that in 1844, Durgaram Mehta who was a staunch reformer had started the Manav Dharma Sabha ; he attempted to propagate the concept of a universal religion based on equality of man and conducted a campaign against superstitions and rituals.

The trend thus started continued to thrive and on occasions to become even more vigorous. Ichharam Suryaram Desai (1853-1912) founded the Sharadapoojak Mandali in 1877 and conducted as its organ a critical monthly significantly named, *Swatantrata*. Articles in the journal were so strong that it fell a victim to the Press Act in 1878 and was closed. The Sanatan Dharma Sabha was established in 1880 ; it also started a girls' school. Later on the Sabha was affiliated to the Theosophical Society. Colonel Olcott, the renowned Theosophist, who visited Surat in 1886 issued an appeal to its citizens to stop cow-slaughter and helped in founding veterinary hospitals.

It will thus be seen that the realization of the backward condition of the people in certain respects and the co-operative effort to improve that condition which the realization inspired are an attractive feature of the social history of Surat during the last century and more. It would be interesting to know briefly the work of a few important institutions which are run more or less on a voluntary basis and which aim at helping progress of the people.

The Andrews Library, Surat.

The Andrews Library, Surat, was founded on 1-7-1850 after preliminary deliberations by prominent citizens of Surat over which Shri A. K. Forbes presided. It is named after Mr. Andrews, an ex-Judge at Surat. (1850).

When Rao Bahadur Naginchand Javerchand Jhaveri donated Rs. 36,000 from which the Naginchand Institute was erected, the library was shifted to the ground floor of the new building of the Institute and has continued there since then (1907).

The total funds of the library amount to over Rs. 25,000. It has been recognised as Surat District Central Library by the Bombay Government. The daily average of readers in the reading room is 500. Its centenary was celebrated in 1950. It has thousands of books, both Indian and foreign.

The Rustompura Dastur Khurshed Library and Seth Hormasji Adarji Dalal Reading Room, Rustompura Surat.

The Rustompura Dastur Khurshed Library and Seth Hormasji Adarji Dalal Reading Room, Rustompura, Surat was founded in 1867 by Dastur Khurshedji with a fund collected by him from the locality. Its original name was "Rustompura Zarthosti Library", and was renamed "Dastur Khurshed Library", in 1889.

In 1909, the library had its own building. The total funds today stand at Rs. 22,200 (1956). The municipality gives a grant of Rs. 150 per year to the library. The average daily attendance is 40. The library possesses 1,353 books.

The Nanpura Library and Reading Room, Nanpura Surat.

The Nanpura Library and Reading Room, Nanpura, Surat, was founded about sixty years ago. Its present building was donated by Seth Bamanji Vakil. The reading room is free and about 50 readers take its advantage every day. The library has funds of over Rs. 12,000 and receives Rs. 150 as yearly municipal grant.

The Gulabbhai KanthadjiDesai and Shri Bhoopendra Balubhai Jhaveri Public Free Reading Room and Library, Sagrampura, Surat.

The Gulabbhai Kanthadji Desai and Shri Bhoopendra Balubhai Jhaveri Public Free Library and Reading Room, Sagrampura, Surat, was founded in 1921. It has a fund of Rs. 18,400 and a building fund of Rs. 18,000. It gets Rs. 150 as yearly municipal grant.

The Jain Jnanavardhak Free Library, Galemandi Bazar, Mahidharpura, Surat.

The Jain Jnanavardhak Free Library, Galemandi Bazar, Mahidharpura, Surat, was founded about 28 years ago. It has been conducted from petty contributions and no fees are charged. The municipal grant of Rs. 150 per year is the only main source of income. An average of 35 to 40 readers take its advantage daily.

The Kamar Free Library, Ranitalao, Surat.

The Kamar Free Library, Ranitalao, Surat, was founded in 1939 by the Patni Co-operative Credit Society, Ltd., Surat and though the management is Muslim (communal), the library is open to all without distinction of caste, creed or religion. It receives municipal grant of Rs. 150 per year.

The Saiyadpura Muslim Association's Library, Saiyadpura, Surat.

The Saiyadpura Muslim Associatton's Library, Saiyadpura, Surat. is conducted by the Saiyadpura Muslim Association but is open to all persons irrespective of religion. The munucipality gives an annual grant of Rs. 150.

Maharani Shantadevi Sarvajnik Mahila and Bal Pustakalaya, Navsari.

Maharani Shantadevi Sarvajanik Mahila and Bal Pustakalaya, Navsari, was founded in 1931-32 by Rajratna Baimai R. Dabu, with a view to catering to the cultural needs of women and children of Navsari and surrounding villages. The founder donated Rs. 35,000 in memory of her mother, Dinbai Dabu, for the construction of the library building.

The library committee conducts competitions in elocution, essay- writing, and reading. It also conducts classes in laundry work, dying, nursing, first aid, and preservation of fruit. Children have their own association and material for games. A club for women is also run. The Navsari Municipality gives good support to the library. The library has about 5,000 books and 350 members.

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Shree Parvatibai Nanabhai Khadayata Sarvajnik Library, Bandhan. Taluka Mandvi, District Surat.

Shree Parvatibai Nanabhai Khadayata Sarvajanik Library, Bandhan, Taluka Mandvi, District Surat, was founded in 1937. Donations amounted to Rs. 5,000. It has 600 books and an average attendence of 45 persons every day. The village population is about 5,000. It had a capital fund of Rs. 4,000 (1956).

Mehfile Anjuman Islam library, Village Kholwad, Via Kim, Dist. Surat

Mehfile Anjuman Islam Library, Village Kholwad, Via Kim, District Surat, was founded in 1911 by the inhabitants of Kholwad who had been to South Africa for business. Its annual expenditure of Rs. 600 is met from contributions from people of that village living in Africa. The management gives help for burial of the poor in the village and takes interest in the welfare of the village people.

The Maganlal Pratapchand Jain Union Reading Room and Free Library, Gopipura Surat.

The Maganlal Pratapchand Jain Union Reading Room and Free Library, Gopipura, Surat, was founded by Maganbhai Pratapchand Zaveri in 1892. He used to contribute Rs. 200 per year for its maintenance for over forty years. It had in 1956 a capital fund of Rs. 5,936. which included securities, furniture and books. It receives municipal grant of Rs. 150 per year. The average daily attendance ranges between 350 to 400.

The Sarvajanik Pustakalaya, Olpad, District Surat.

The Sarvajanik Pustakalaya, Olpad, District Surat, was founded in 1948, with a hundred books and has now about 2,100 books. It is recognised by the Gujarat Government and receives from it an annual grant of Rs. 450. It is open to all without distinction of caste or creed. About 2,500 persons read per year.

The Parvatibai Sarvajanik Pustakalaya, Mahuva, District Surat.

The Parvatibai Sarvajanik Pustakalaya, Mahuva, District Surat, was founded in 1915 through the donation of Rs. 1,100 from Keshavram Karunashankar Vyas in memory of his wife Parvatibai. It has its own building constructed in 1915 at a cost of Rs. 3,300 of which Rs. 1,100 were donated by the Prant Panchayat and Rs. 1,100 by Government. It has a reading room also. The library has about 2500 books.

The Sarvajanik Education Society, Surat.

The Sarvajanik Education Society, Surat, was founded in 1912 by Chunilal Ghelabhai Shah with the object of spreading education by making it cheap and easily available. It conducts M.T.B. College (Arts & Science), Sir K. P. College of Commerce, Sarvajanik Law College, Chunilal Gandhi Research Institute, T. & T. V. Sarvajanik High School, T. & T. V. Sarvajanik Middle School, Sarvajanik High School for girls, and Haripura Sarvajanik High School. This is the biggest educational institution in Surat district with over 6,500 students including about 1,200 girls, and property and funds of Rs. 38,56,000. It had 242 men on its teaching staff during 1954-55.

The society consists of donor-members and active workers who are called volunteers (corresponding to what are called life-members in similar other societies).

Noteworthy donations were from (1) Tapidas & Tulsidas Varajdas Trust Fund, Rs. 2,26,443 ; (2) Sheth Maganlal Thakordas Modi, Rs. 2,00,000 ; (3) Sir Kikabhai Premchand, Rs. 1,61,000 ; (4) Sheth Ranchhoddas Tribhovandas Modi Trust Fund, Rs. 1,58,028 ; and (5) T. N. Malvi, over Rs. 75,000.

The Society has about 1,200 donor-members. Its annual expenditure amounted to Rs, 10,38,300 in 1954-55.

The Vanita Vishram, Surat

The Vanita Vishram, Surat, was founded by Bajigavri D. Munshi and Shivgavri K. Gajjar in 1907. It has its own buildings at Athva Lines, Surat. It has a managing council of 18 members.

The aim is to ameliorate the condition of Gujarati Hindu women and to elevate their social status by arousing their interest and educating them in subjects leading to their moral and spiritual advancement.

It runs a training college for women primary teachers with a practising school, since 1950. The inmates are given training in cooking and sewing and other similar household work. Attention is paid to physical training also. There is a boarding for school teachers. It has more than 100 boarders. The college provides for 100 students. The institution has given shelter to hundreds of poor orphan girls, widows, and women during the last 50 years.

The Rashtra-Bhasha Pracharak Mandal, Surat.

The Rashtra-Bhasha Pracharak Mandal, Surat, was founded in 1937 by Pandit Parmeshthidas Jain with the object of propagating the study of Hindi. It has over two hundred members. It conducts (1) Rashtrabhasha Vidya Mandir, which has 26 branches and more than 100 pracharaks ; (2) the Rashtrabhasha Adhyapan Mandir, started in 1938 which teaches the course of the Govt. examination of Hindi Shikshak Sanad ; (3) the S.S.C. Hindi Class started in 1950 ; (4) the Rashtabhasha Mahavidyalaya, which teaches the courses of examinations held by the Hindi Sahitya Sammelan, Prayag ; (5) the library which possesses over 5,000 Hindi books over and above English, Urdu, and Gujarati books and (6) a reading room.

The Mandal organizes every year competitions for speeches and papers in Hindi and maintains a book-loan system. It has the Gandhi Sahitya Granthalaya, which possesses several hundred books of Gandhian literature and the Aurobindo Sahitya Granthalaya containing books on Aurobindo Ghosh's philosophy.

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The Surat Parsi Panchayat, Shahpore, Surat.

The Surat Parsi Panchayat, Shahpore, Surat, owes its existence to the disastrous fire of 1837, when Hindus and Parsis collected, a fund to give relief to the distrassed. Out of the fund, a surplus of Rs. 1,10,300 was left and it was allocated to the Parsi and Hindu communities, the share of Parsi coming to Rs. 59,000 to which Rs. 23,732 received from the Parsis of China were added. The amount was passed into a trust created on 1st January 1841 known as the "Parsi Surat Charity Fund." The Trust, thereafter, accepted other donations for various charitable purpsoes.

In the beginning the Panchayat distributed doles to deserving and needy Parsis, managed the disposal of the dead and arranged for a few feasts such as "Gambhars". In 1874, the Panchayat took over the administration of the Sir Jamshedji Jeejibhoy English School for Parsi Boys. In 1912 with donations from Seth Rustomji Mancherji Kooka, the Panchayat started an orphanage for Parsi boys. During 44 years of its existence, it has housed, fed, clothed and educated hundreds of Parsi youths.

The Panchayat started in 1920, with a substantial donation from Bai Goolbai Nussarwanji Mehta, a meternity hospital in her name. To it was added almost at the same time, another institution, principally from a donation received in memory of Seth Rustomji Dhanjibhai Tarachand, a general hospital, equipped with X-ray and diagnostic departments, the benefit of which is given to all communities.

The Panchayat founded in 1936, the Narimam Home and Infirmary with a donation from the Nariman family in memory of the renowned linguist Shri G.K. Nariman. This home at present houses about fifty aged, infirm, invalid, decreipts and incurable persons of the Parsi community.

The Panchayat also started the Parsi Technical & Industrial Institute in 1939, which was later known as the "Sorabjee Nussarwanjee Paruck Parsi Polytechnic Institute." The assets and management of this Polytechnic Institute have been transferred to the trustees of the Maneckjee Cooper Education Trust.

The "Kaikhushru Hormasji Industrial Institute" for Parsi girls and women was started by the Panchayat in 1946 from the donation of Mrs. Putlibai R. D. Sethna. It gives free training in domestic arts.

The Bai Pirojbai Manekji Patel Girls' English School was taken over by the Panchayat in 1947. It is now open to girls of all communities. The Panchayat also runs several primary schools for Parsi children.

The total assets of the Panchayat amounted to Rs. 1,40,50,000. in 1955-56. It is the biggest communal organization in Surat District.

The Surat District Muslim Education Society, Sodagarwad, Surat.

The Surat District Muslim Education Society, Sodagarwad, Surat, was founded in 1935 by Syed Hamiuddin Jamadar with the object of promoting and popularising literacy and education among the Muslims of the city and the district.

It started an Anglo-Urdu School in 1938 with only 22 students. The school has now (1956) 500 students on its register. The Society has assets worth over Rs. 3,25,000.

The Vithaldas Thakordas Hindu Gurukul, Athva Lines, Surat.

The Vithaldas Thakordas Hindu Gurukul, Athva Lines Surat, owes its existance to a donation of Rs. 5,00,000 from Mrs. Tarabai Vithaldas in memory of her husnad, Shree Vithaldas Thokordas Chokshi. It was founded in 1936 on the lines of the ancient *Gurukul* system. In the beginning, the inmates used to get free boarding, lodging, and education. It has two spacious bungalows. which were also donated in addition to the sum specified above, and which house the school and the ashram. Religious instruction is compulsory.

The Gurukul conducts a Sanskrit Pathshala wherein *Karmakanda*, *jyotisha* and *vaidya vidya* are taught. It teaches higher Sanskrit courses of Sanskrit *shastri, tirtha* and *acharya* examinations and prepares students for Sanskrit examinations of Banaras and Calcutta.

The ashram school is now a full-fledged High School recognised by the Gujarat Government.

Shri Vidyamritavarshini Sanskrit Pathshala, Bulsar

Shri Vidyamritavarshini Sanskrit Pathshala, Bulsar, was founded in 1912 with a view to propagating the study of the Vedas and classicial Sanskrit literature. It teaches free of charge. It has its own building with free boarding and lodging facilities. It has a library which has over 3,000 books.

The Pardi Education Society, P.O. Pardi, Surat.

The Pardi Education, Society, P. O. Pardi, Surat, was founded in 1918 and conducts the following four insititutions :— (1) The D.S. Umrigar Sarvajanik High School Pardi, (2) J. F. Sarvajanik Middle School, Pardi, (3) Dr. K.T. Pardiwala Memorial Hostel, Pardi and (4) Dhunbai Temulji Pardiwala Free Reading Room & Library, Pardi.

In all 725 boys and girls study in these schools. It had started several primary schools in far-off villages, which were later on taken over by the Surat District Local Board.

The Jeevan Bharati Mandal, Surat.

The Jeevan Bharati Mandal, Surat, was founded by Shri Chandravadan Chunilal Shah. in 1946, with the object

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of evolving a new technique for the education of the whole man. The mandal's Jeevan Bharati institution has three sections. (1) pre-primary, (2) primary and (3) secondary, with a total strength of about 750 boys and girls and a staff of 40 men and women. It has been recognised by the Government as one of its multi-purpose schools, and has provided special courses in fine arts, viz., painting and music, hand-spinning and weaving and woodwork technology. Twenty-five of its students are admitted every year to the Government Technical Centre, Surat, for training in electrical and mechanical engineering and workshop technology.

Madressa-e-Mohamedia Piperdiwala Charitable Trust, Rander, Dist. Surat

Madressa-e-Mohamedia Piperdiwala Charitable Trust, Rander, Dist. Surat was created as early as in 1866 by Haji Hasham Ibrahim Piperdiwala and his brother. Ismail Ibrahim Piperdiwala. It has been conducting M.M. Piperdiwala High School and M. M. Piperdiwala Hostel at Rander since 1896.

The school became a High School in 1921 and is run on non-communal lines It has a separate playground.

About 72 of the poor Muslim students from Surat, Broach, Panchmahals and Ahmedabad districts, especially from villages, were admitted to the hostel. They were provided free boarding, lodging, and clothing till 1942. As the investments of the trust were at Rangoon, income from that source ceased to be received from 1942 as a result of the World War II and so the trust management had to charge nominal fees since then to hostel students.

Bai Navajbai Tata Zarthosti Girls' School, Navsari.

Bai Navajbai Tata Zarthosti Girls' School, Navsari was founded in 1858 by Sheth Dosabhai Faramji Kamaji. In the first year. it had 59 girls; the number rose to 440 in 1956. In 1872 a sum of Rs. 7,000 was donated to the school in memory of Navajbai Tata. after whom the school was named.

The school teaches, apart from school subjects, sewing, weaving sacred thread and religion. English was introduced since 1918. In 1930, a donation of Rs. 4½ lakhs was made from the estate of Manekbai, daughter of Nussarwanji Ratanji Tata. In 1950, a new spacious building was constructed for the school from the danation of Rs. 2½ lakhs from the Sir Ratan Tata and Sir Dorab Tata Trusts. The school has a playground and garden, gymnasium and theatre. It did not charge any fees till 1948 and was open only to Parsis till 1951, but has been thrown open to all communities since 1952. It has 440 girls of whom 190 are Parsis, 216 Hindus, and the rest others.

The Patidar Vidyarthi Ashram, Nanpura, Surat.

The Patidar Vidyarthi Ashram, Nanpura, Surat, which is now called Vallabh Vidyarthi Ashram was founded in 1911 by Shree Kunverji Vithalbhai Mehta for giving residential facilities to students coming from villages. It became a centre of political

activities of the district during the non-co-operation movement of 1921, Bardoli satyagrah of 1928 and the fight for freedom in 1932, when its properties were confiscated.

Inmates of the Ashram put on khadi, spin and do all work themselves. About 2,500 students have taken advantage of the Ashram during the last 35 years.

The Ashram is situated at Nanpura, Surat.

The Valod Vibhag Kelavani Mandal Valod, Via Madhi, District Surat, (T. V. Rly.)

The Valod Vibhag Kelavni Mandal, Valod, Via Madhi, District Surat (*T. V. Rly*).) was founded in 1950 with a view to spreading education in the Valod mahal. It conducts Shree Sanmukhlal Govardhandas Shah High School, Valod. It was started in 1899 as a middle school and today it is a full-fledged high school. It has its own building on the banks of the river Valmiki. Shri Patidar Ranchhodji Valji Kanji Chhatralya is also attached to the school.

The Suryapura Sanskrit Pathashala, Surat.

The Suryapura Sanskrit Pathashala, Surat, was founded in 1901 with a view to propagating the s udy of Sanskrit. It is counduct d by a committee of management. It is situated in the heart of the city, in the *Amaliran* locality now known as the Narmad Chakla.

It has its own building. Students are coached free of charge in *vyakarana, nyaya, sahitya* etc. by sanskrit Shastris and qualified Pandits, who prepare them for the Calcutta and Banares Sanskrit examinations. There is a free boarding attached to the Pathashala. Even books are supplied free of charge. *karmakanda, dharmshastra, purana* etc. are the subjects taught.

All India Women's Conference, Surat Branch.

All India Women's Conference, Surat Branch came into existence in 1940. Its aims and objects are : (1) to work for a society based on social justice, etc., (2) to stand against all separatist tendencies, (3) to work actively for the general progress and welfare of women and children,(4) to support the claim of every citizen to the right to enjoy basic civil liberties.

The branch has been working in the city through its branches in different wards which have their own secretaries. It made a socio-economic survey in 1955 in one of the wards of the city. It conducts first-aid classes and arranges cultural programme from time to time. A shield is awarded every year to the ward, which does the best work during the year. Every ward is provided with nursing appliances which are available free to those who need them.

The latest activity of the branch is a child welfare centre where children from under-privileged homes are given free milk tonic, massage, ultra-violet rays, and other treatments. About

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one hundred children attend the centre every day. It has also a children's circulating library.

Entertainment programmes, brain trust, dramas, debates, cooking classes, health competitions etc., are conducted by the branch from time to time.

The branch has also started a co-operative store, which provides work to many women in need of employment.

Shree Surat Stree Mandal.

Shree Surat Stree Mandal came into existance in 1929. Its membership in 1956 was over 800. The original name was the "Hindu Stree Mandal" which was changed to "Shree Surat Stree Mandal" in 1939 thus making it a cosmopolitan body. It conducts the Nandkunverba Library since 1934 and sewing diploma classes since 1950. Over 200 women attend them.

The Mandal celebrated its silver jubilee in 1954 and collected over Rs. 11,000 for its building fund. It celebrates several anniversary festivals and organizes competitions, lectures etc.

The objects of the association are to cultivate a liking for moral, social, and physical progress of women, to safeguard the fundamental rights of women and to create a feeling o co-operation among them. About 1,500 women take advantage of the library.

The Surat Mahi Club.

The Surat Mahila Club was founded in 1933 with the object of providing facilities of recreation to women and young girls and children. It arranges tournaments, picnics, entertainments, lectures, debates, *bhajans* and other festive celebrations etc. It has its own building since 1939.

The club started a children's club in 1954, where childrei. play different indoor and outdoor games.

The club has 625 members and is located in the central part of the city.

The Balika Samaj, Surat.

The Balika Samaj, Surat, was founded in 1931 . It has now 150 members. Over 5,000 girls have taken advantage of the Samaj's classes in sewing, music, garba, dancing, physical training and *Shreemad Bhagwadgita*, etc. The classes are conducted on saturdays and sundays. The Samaj is a registered body. It celebrates *Sharadutsava*, *Gauriutsava* and national festivals like the Independence Day, Gandhi Jayanti, Republic Day etc.

Its office is situated on the Gajjar Road, near Nagar Falia, Surat.

Bai Shirinbai J Lashkari Ladies Club, Surat.

Bai Sirinbai J. Lashkari Ladies Club, Surat, was founded in 1927, when its name was the Surat Ladies Club. It was named after Smt. Shirinbai Lashkari, the founder, in 1944, when she expired. It had 57 members in 1956. Facilities are provided for playing badminton, table tannis, bridge etc., by the club.

The Navsari Mahila Udyog Mandir Navsari.

The Navsari Mahila Udyog Mandir, Navasari, was founded in 1945-46, with the object of helping women economically and making them self-supporting. It conducts a sewing class for preparing girls for Government diploma courses. Knitting, cloth printing, carpet weaving and hosiery work are also taught.

The Kastoorba Sevashram, Maroli District Surat.

The Kastoorba Sevashram, Maroli, District Surat, was founded in 1930 by Shrimati Mithuben Petit. It conducts various activities for the welfare of the women folk in villages. Among them are (1) khadi work, (2) medical activities, (3) educational work, (4) welfare centres for women and children, and (5) goshalas.

It has a weaving school at Maroli ; spinning centres at Maroli, Vanz, Mangrol, Vankal, and Chaswad ; and a Khadi Ashram at Poona (taluka Mandvi) in collaboration with the Sarvodaya scheme.

The Ashram conducts a public dispensary and a mental hospital at Maroli and a public dispensary at Chaswad. It also conducts (1) Gandhi Pustak Mandir at Maroli ; (2) Basic Training Teachers' Class for Surat, Broach, Baroda and the Panchmahals Districts, and (3) Ashram Schools at (a) Chaswad (Broach district), which has 120 boys and girls (b) Ambawadi (Broach district), which has 30 boys and girls and (c) Kevdi (Broach district), which has 30 boys and girls.

The *goshalas* are at Chaswad, Maroli, and Ambavadi.

The Welfare Centres for women and children are the Ashrams at (1) Maroli, (2) Dhaman, (3) Kadoli, (4) Simalgam, (5) Nimrai with several sub-centres in different villages. The activities at these centres are (a) *balwadi*, (b) sewing class, (c) spinning wheel class, (d) knitting and embroidery class, (e) social education, (f) medical relief, and (g) distribution of ghee and milk.

The Ashram is registered under the Bombay Public Trust Act, 1950.

The Ashram started a *Swavalambi* (self-dependent) hostel in 1953, where boarders bring their own cereals and cook themselves. A basic Teachers' Training Class gave training to 446 men and women teachers from Surat, Broach, Baroda and Panchmahals districts.

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Khadi work is conducted at nine villages which have 136 spinners.

The mental hospital at Maroli had 496 and 467 indoor patients during 1953 and 1954 respectively. They were from the 14 districts of the Bombay State, from Saurashtra, Kutch, Rajasthan, Madhya Pradesh, Madras, U.P., Hyderabad, and Daman. The outdoor patients at the Maroli and Chaswad dispensaries numbered 11,475 and 7,600 respectively, during 1953 and 1954. There is *dharmashala* attached to the hospital where relatives of patients put up.

The Surat Medical Union.

The Surat Medical Union was founded in 1915 and has been affiliated to the Indian Medical Association. It has its own building with the Dr. J. F. Lashkari Hall in it. The funds amount to Rs. 4,000.

It serves the rural areas by providing free medical aid through occasional touring in Medical Motor Vans. Injection, medicine, medical examination and operation, are all free.

The Anti Tuberculosis Hospital & Anti Tuberculosis Parin Banu Clinic Association, Ashvanikumar Road, Surat

The Anti Tuberculosis Hospital & Anti Tuberculosis Parin Banu Clinic Association, Ashvanikumar Road, Surat, was founded in 1939 by three Parsi families. Dr. Dinshaw Sorabji Doctor donated the building for the clinic in memory of his daughter Parin Banu, while Rs. 8,000 were received in memory of Dinmai Kamdin from her son P. F. Kamdin.

The hospital consists of a special ward, a general ward, a free ward for males and a free ward for females. Its capacity is of 40 beds. It receives grants from Central and State Governments and from municipal and local bodies. It mostly deppends on generous donations from the public. In 1955-56 the landed property and equipment were worth over Rs. 80,000 and other funds amounted to Rs. 14,504. The annual expenditure is over Rs. 44,000.

R.N. Chavsarewala Free Eye Hospital, Bulsar.

R. N. Chavsarewala Free Eye Hospital, Bulsar, was founded in 1920 by Khan Bahadur D. R. Bulsara, for giving free treatment to all patients suffering from diseases of eye, without distinction of caste, creed, locality or means. Besides free treatment (medical and surgical), poor people are also given free food, spectacles and travelling expenses.

The management vests in a Committee of 18 members, among whom three are Government officers, six representatives of the people of Bulsar, five of the donors and one each of the Surat District Local Board, the Bulsar Municipality, the Blind Relief Association, Bombay, and the Medical Officer in charge. It is the only institution of its type in south Gujarat, and meets the needs of the people of Surat, Broach and Thana districts,

particularly of the backward classes. It has a provision of 36 beds. Between 1929 and 1955, 1,64,782 patients were treated and 30,884 operations performed ; 5,456 patients were supplied free spactacles and 3,662 free food.

Sheth Morarbhai Vijbhukhandas Hospital for women and children, Bhagatalao, Surat.

Sheth Morarbhai Vijbhukhandas Hospital for women and children, Bhagatalao, Surat. was founded in 1895, the first of its kind in Gujarat. Lady Countess of Dufferin, the then Viceroy's wife began collecting a fund in 1886 and the Countess of Dufferin Dispensaries Society was founded in 1895. Its existence was mainly due to an initial donation of Rs. 75,000 and a subsequent donation of Rs. 60,000 from Dayakore Morarbhai Vijbhukhandas Malvi. Shri Nandlal Chunilal donated Rs. 20,000 for the nurses quarters. The hospital started working with only three beds. But, thanks to the devoted services of Dr. Mrs. Rukhmabai who worked in the hospital for over 22 years and on account of whose long and intimate association, the hospital came to be popularly known as Rukhmabai hospital. The institution made continuous progress. In 1956 it had provision for 35 beds, but had actually to accommodate 50 patients ; it had 1,557 indoor and 7,797 outdoor patients, of whom 1,200 were from villages. Outdoor patients are charged only Re. 0-2-0 as medical fees. About 72 per cent indoor and about 62 per cent outdoor patients are treated free of charge. The average daily number of patients in the dispensary comes to about 150.

The hospital conducts a midwife training class, where six students are under training. The women students of the local Ayurvedic College studying for the D.A.S.F. examination are given facilities for medical education and training in midwifery.

The Countess of Dufferin Dispensaries Society which conducts the hospital is registered under Act XXI of 1860 and has 175 members. The committee has as its President the Collector of Surat (ex-officio). The diamond jubilee of the hospital was celebrated in 1955. Its funds amounted to Rs. 21,230 and property worth Rs. 2,36,000 in 1955-56.

The Indian Red Cross Society's Branch of the Surat District, Daria Mahal, Surat.

Indian Red Cross Society's branch of the Surat District, Daria Mahal, Surat, has been rendering valuable service to Surat district since 1917. It has two mobile vans for free medical relief with qualified doctors and a compounder. It has extended its activities to 86 villages. In 1955 10,393 patients (4,269 men, 3,294 women and 2,830 children)received free medical aid.

The Red Cross (Surat) supplied skimmed milk powder to school children and poor people, to the Remand Home for children, the Leper Asylum, the Hindu Orphanage, the T. B. Hospital, the Lakhpati Hospital, the Child Welfare Centre, the Maskati Hospital and some poor persons at Navsari. In all

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7,155 lbs. of powder milk was distributed. The Bombay State branch donated Rs. 10,400 during 1954-55 for medical activities in villages.

The Hindu Surat Charity Fund.

The Hindu Surat Charity Fund, Balaji Road, Surat. The fund owes its existence to the disastrous fire of 1837. Charitable minded people, including citizens of Surat residing in Bombay, started a fund to help the victims of the fire. Donations in cash and kind were received from all communities. Out of the surplus of the fund which remained after granting necessary help to the victims of the calamity, Rs. 51,300 were allocated to the Hindu Surat Charity Fund and Rs. 59,000 to the Parsi Panchayat of Surat.

With the fund of Rs. 51,300 the Surat Committee started work. It has thereafter received serveral donations and contributions and continues to receive them even at present. It has helped since then, hundreds of poor Hindu families by distributing free food grains and cloth. It also conducts in the heart of the city on Balaji road a reading room which is free and a library which has over six thousand books and which regularly receives a number of journals. The average number of readers of books per year comes to 12,000.

The fund gives free stundentships and loan text books to poor and deserving Hindu students.

A hospital and a maternity home are also conduted by the fund committee. Some poor patients are treated free of charge, for which about Rs. 10,000 are spent per year. The dispensary for outdoor patients charges only Re. 0-3-0 per patient for medicine per day. Over 29,000 patients are treated for medicine and 800 in the maternity home for surgical operations every year. The pathology section records over a thousand patients per year.

The hospital conducts a class for the training of nurses. The hospital gets free honorary services from many leading medical practitioners. It also maintains its own paid staff of doctors, nurses, commpounders, clerks etc.

The fund has two chief committees, one at Bombay and the other at Surat. In 1954 the management had a permanent fund of nearly Rs. 5,80,000 over and above landed properties, books, furniture and medical apparatus.

The Panjarapole, Surat.

The Panjarapole, Surat : Another old institution is the Panjarapole founded in 1841 with a view to serving animals rendered useless for service. It has four branches in Surat district and maintains about 1,200 animals. It takes an active interest

in improving the breed and the condition of cows and co-operated with the Bombay Government in that campaign in Government's First Five Year Plan.

Go-Sammelans, exhibitions, yearly Gopashtami weeks, and several functions are organised by the institution. It is registered under the Public Trusts Act.

The institution owned in 1953 landed property, deadstock and livestock worth over Rs. 7,00,000 and generally, spends over Rs. 1,50,000 per year for the maintenance of animals. The expenses are met from interest, rent from land, proceeds from milk and donations.

The Ashaktashram Surat.

The Ashaktashram, Surat, was founded in 1912 with the object of helping and maintaing old and infirm person, the blind, the lame, the dumb and the disabled, free of all charges. In 1956 there were in the institution 101 such desitute persons who were given free food, clothing, lodging and medicine. The ashram also maintains a charitable hospital, dispensary and surgical department. Only Rs. 0-2-0 are charged as fees to outdoor patients. The poor are given free medicine.

The permanent fund of the institution stood at over Rs. 8,00,000 in 1956 and the current fund at over Rs. 1,01,000. Landed property was worth about Rs. 2,80,000, maintenance charges for the hospital come to about Rs. 67,000 per year while for maintaining the inmates a sum of Rs. 16,000 per year is spent. The *ashram* receives donations, large and small, in the form of foodstuffs, cloth, beddings, cash etc. and is not run at a loss. It has airy buildings for residential purposes. Its office is at Rampura road Surat.

Seva Mandal, Surat

Seva Mandal, Surat, was founded in 1919 with the object of serving the public of Surat in the fields of physical culture, literary activities, education, spiritual progress, and economic uplift. It keeps itself aloof from political and religious subjects.

Its activities include arranging public lectures, circulating libraries in different localities, annual physical culture competitions, youth week celebrations, arts exhibitions, musical entertainments, spinning competitions, camps for distributing free medicines etc.

It lends text books to poor deserving students. This work was begun in 1920 and was continued till 1956. The books are lent only at a nominal charge for "wear and tear," to students of all castes and communities. People donate books and cash for the work. College students are also given costly text-books.

The Seva Mandal has its office in the Arya Samaj Hall, Sonifalia, Surat.

The Surat District Students' Aid Co-operative Mandal Ltd.,

The Surat District Students' Aid Co-operative Mandal Ltd., was founded in 1925 with a view to giving help by way of loans to poor students desirous of prosecuting their studies in India and abroad. It has a share capital of Rs. 32,800 and a reserve

fund of Rs. 6,772. Several students have taken advantage of the loans and a few have even proceeded to foreign countries with the help of the Mandal. The loan is given without distinction of caste, creed or religion.

It lends up to Rs. 2,500 for studies in India and Rs. 3,500 for studies abroad. Its office is located in the Arya Samaj Hall, Sonifalia, Surat.

The Jeeva-Daya Fund, Surat.

The Jeeva Daya Fund, Surat, owes its existence to a donation of Rs. 55,000 made in 1906 by Seth Naginchand Kapurchand Jhaveri. A trust was created in 1936 and in 1954 the fund stood at Rs. 2,20,000. The object of the fund is to free disabled, old and useful animals from being sent to slaughter houses. It has till now spent over Rs. 1½ lacs by way of compensation to butchers. The animals thus rescued are sent to the Panjarapole. The annual income is Rs. 8,400. Most of the donations are made by Jains. There is a board of trustees to manage the Fund. Its office is on the Gopipura main road, Surat.

Parwatibai Leper Asylum & Lady Wilson Leprosy Clinic, Surat.

Parwatibai Leper Asylum and Lady Wilson Leprosy Clinic Surat, was founded in 1927. A school and a dairy are attached to the asylum. There were in 1953, 135 patients in it. Five Swiss women trained in this disease have been rendering very useful services on a nominal honorarium of Rs. 50 per month since 1957. The silver jubilee of this asylum was celebrated in 1953 when the Government of India gave a grant of Rs. 10,000 and the Bombay Government contributed Rs. 11,650. The Central Social Welfare Board, Delhi donated Rs. 5,000. The monthly expenditure comes to Rs. 3,500. The Collector of Surat is the President of the Committee of Management. The asylum is situated on the Ashwanikumar road, Surat.

The Mahajan Anath Balashram, Surat.

The Mahajan Anath Balashram, Surat, situated on the outskirts of the city of Surat, maintains orphaned children coming from all over the country. It used to have an industrial school, which imparted instruction in different crafts. Its speciality was manufacture of fancy carpets which earned prizes at exhibitions. Unfortunately the school had to be closed in 1900. The Ashram has its own buildings and conducts a primary school to which children below fourteen years are admitted. Girls are trained in home science, cooking, knitting, sewing etc. The annual expenditure in 1955-56 was Rs. 44,811. The institution has a permanent fund of Rs. 50,000 and has to carry on its activities with the help of petty donations in the form of foodgrains, clothing, vegetables and sweets on festival days and in cash. Several doctors in the city render honorary service to the orphans. The office of the Ashram is situated near Lal Gate, Kanpith, Surat.

The School for the Blind, Surat.

The School for the Blind, Surat, was founded in 1954 by the Yuvak Sangh of Surat, to make blind people self-supporting and thus save them from begging for their livelihood and becoming a burden to society. It is a residential school teaching reading, writing, arithmetic, music, cane-work, weaving etc. The inmates are given free boarding, lodging and education facilities four blind men

have passed the music examination held by the Gandharva Maha Vidyalaya, Bombay. The Central Social Welfare Board, Delhi, gave a grant of Rs. 3,500 to the institution in 1955-56. The school is recognised by the Government. It is situated at Dhobhi sheri, Nanpura, Surat.

The Maskati Charitable Dispensary and Maternity Home, Surat

The Maskati Charitable Dispensary and Maternity Home: was opened in 1911, with the object of giving free medical aid to all. It is entirely free even today and serves about 300 patients per day. The management rests with the Maskati Properties Charity Trust, Bombay, which has a fund and estates of about Rs. 56 lakhs, and from which Rs. 3,15,000 were donated to the Surat municipality to run the Maskati Dharmartha Hospital at Surat. The dispensary is at Karwa road, Navapura, Surat.

The Tapi Brahmacharyashram Sabha, Surat.

The Tapi Brahmcharyashram Sabha, Surat, owes its existence and progress to the devoted services of a scholar Sanyasi named Swami Atmanand Sarsvati. He came to Surat in 1922 and conducted spritual discourses. From this sprang the idea of starting a Brahmacharyashram and in 1924 the Ashram was started on the banks of the river Tapi. The Swami dedicated his life to it. A goshala, a gymnasium, a reading room and library, an Ayurvedic class and a pharmacy were added in course of time. The Swami expired in 1942. Before his death, he had begun collecting funds for starting an Ayurvedic College. He had even started seven Ayurvedic dispensaries in different localities of the city and the district with a view to giving medicine for a nominal fee of Re. 0-2-0. These dispensaries cater to the needs of about 68,000 sick per year. The Ashram school was, however, closed in 1948 due to financial stringency. The Ochhavlal Nazar Trust made a donation of Rs. 3,75,000 to found an Ayurvedic College at Surat. The Swami collected another two lakhs and the college started work from 1946. Other donations were also received. A well-equipped hospital is attached to the college. There is a maternity home and a hostel too.

The hospital has a provision of 60 beds. The average number of patients attending the dispensary every year is over 90,000, hospital section over 18,000, surgical section over 3,000, the maternity home over 300, X-ray section over 1,000 and pathological section over 2,800. The Sabha conducts an Ayurvedic pharmacy also. The college trains students for the degree of D. A. S. F. with a four year's course and had in 1956 a strength of 257 students including 45 women. Research is conducted in the hospital on behalf of the Board of Ayurvedic Research of the Bombay State. The College is recognised by Government. It is located very near the Surat railway station at Lal Darwaja Road. The Sabha consists of patrons, donors, life members and ordinary members, and its total funds and assets were Rs. 17,71,138 in 1956.

The Bharat Sevashram Sangh, Surat Branch.

The Bharat Sevashram Sangh, Surat Branch is an organization of Hindu monks, who have dedicated their lives to selfless service of humanity. It was founded by Acharya Pranavanandji of East Bengal. Its head office is at Calcutta and it has branches all over India, Pakistan and abroad. It is a non-political organiza-

tion (Registered under Act XXI of 1860). · In the field of social service it makes no distinction of caste, creed or colour.

The Surat branch, popularly known as the "Hindu Milan Mandir" was founded in 1941, by Swami Advaitanandji with the co-operation of a few leading citizens.

It has a well-equipped gymnasium for imparting physical training and also conducts a Homeopathic charitable dispensary where about 3,000 patients are given free medical aid per year and medicine is given for a nominal fee.

The Branch publishes a monthly Gujarati periodical named *Hindu Milan Mandir*, for the moral and spiritual uplift of the people. It manages a Vidyarthi Ashram (Student's home) on a moderate scale. Preaching parties furnished with modern equipment like magic lantern slides, microphones, electric generator etc. are sent by the branch from time to time to preach and propogate moral and spiritual ideals among the masses in villages. Relief work is undertaken during times of floods and famines. The premises of the branch are situated at Besant Road, Desaipole, Surat.

Kastoorba Vaidayakiya Rahat Mandal, Bulsar, District Surat.

Kastoorba Vaidyakiya Rahat Mandal Bulsar, District Surat was founded in 1944 with a six-bed maternity home. Its object is to serve the general public in the medical field without any distinction of caste or creed. It possesses its own building built at a cost of Rs. 2,75,000 in 1953. The activities conducted are (1) a maternity home with 40 beds, (2) a general nursing home, (3) an out-patient department, (4) a clinical laboratory, and (5) an x-ray department. In 1957 it started a surgical hospital with 60 beds. The hospital was raised by public subscriptions.

The St. John Ambulance Brigade (India), Surat Branch.

The St. John Ambulance Brigade (India), Surat Branch (No. 3 District Surat Comsmopolitan Division) was founded in 1917, the first of its type in Gujarat. It renders free service without any distinction of caste or creed, colour or nationality. It has an ambulance motor car and a hand-carriage to carry patients old and infirm from one place to another in the city and surrounding villages. It also renders free service on occasions of festivals, fairs and big crowded meetings. It renderes free first aid service and removes the patients to hospitals. The municipality gives an yearly grant of Rs. 200 to the branch. Its head quarters are at R. M. Kooka Parsi Panchayat Buildings, Shahpore, Surat.

Child Welfare Society and the District Probation and After-care Association, Surat.

Child Welfare Society and the District Probation and After-care Association, Surat, originated from the Children Protection Society founded in 1937. The Remand Home (Bal Kalyan Kendra) was founded in 1940, where criminals under sixteen years are admitted till their cases are disposed of by the Juveniles Courts.

Children who disappear from homes, wander, keep in company of undesireble people, beg or are a prey to the tactics of criminals

and ruffians, are admitted and maintained by the Remand Home. It has as Chief Judge, the First Class Judicial Magistrate of Surat, assisted by two women judges. The Court's proceedings are conducted in accordance with the provisions of the Children's Protection Act of 1948.

The home has two sections : (1) The remand section imparts education in handicrafts. (2) The fit-person section gives training in hand-spinning, card-board and file manufacturing, binding tailoring, gardening and weaving on handlooms. Those who can study are sent to schools. Boys above the age of 18 are provided employment. Girls are taught knitting, sewing and cooking. Scouting is a speciality.

Children are taken for excursions. They play games, indoor and outdoor, and listen to radio. There are at present (1956) 69 children of whom six are girls. Government provides for their food and pays a grant to the institutions.

There is a committee for its management which has employed two probation officers, a craft instructor, three watchmen and an aya for the control and supervision of the Home. Doctors in the city render honorary services when needed. It is located at Anikwadi, Ghod-Dod road, Athva Lines, Surat.

The Anavil Vidyarthi Ashram, Majura Bhagol Road, Surat.

The Anavil Vidyarthi Ashram, Majura Bhagol Road Surat, was founded in 1906 by Shri Dayalji Nanubhai Desai who devoted his life to its work. His object was to promote the mental moral and physical growth of the young generation. Students of all communities are admitted to this Ashram.

A building for the Ashram was purchased in 1917. Since 1954 it has 12 acres of land, nine buildings, a gymnasium, water-works, bathrooms, a spacious garden and an open play-ground.

The Ashram was a centre of political activities since 1916 when the Home Rule agitation was started in Surat. During 1920-21 1930-32 and 1942-45, its inmates praticipated in the political struggle in the city and the district. Gandhiji, Jawaharlalji, Sardar Vallabhbhai, and other first rank Indian Congress leaders used to put up in the Swarajya Ashram, adjoining the Anavil Ashram. In 1932, the ashram was confiscated, sealed and boarders turned out. It was in Government possession for four years.

About 4,000 students have taken advantage of the Ashram till 1954. It has a permanent capital fund of about Rs. 1,00,000 and buildings and assets worth Rs. 2,00,000. Students are charged nominal fees.

The Surat District Harijan Sevak Sangh, Surat.

The Surat District Harijan Sevak Sangh, Surat was started in June, 1933. The objects of the Sangh are removal of untouchability and social, educational, economic, and cultural uplift of Harijans. It was decided to establish its branches in the whole district.

The *Pracharaks*, working on behalf of the Sangh, do propaganda work against untouchability in the district. They try to

CHAPTER 19. — Voluntary Social Service Organizations.

get the hardships of the harijans removed and encourage Harijans to from co-operative housing societies.

The Sangh started in 1933 a free dispensary exclusively for Harijans. But as admission to public charitable hospitals is now easy the dispensary was closed from 1st January, 1955.

The sangh conducts a sanskara kendra for Harijan children in Surat, a balwadi for Harijan children, and a hostel for Harijan and backward class boys at Billimora.

Shree Navsari Sangit Vidyalaya, Navsari, District Surat.

Shree Navsari Sangit Vidyalaya, Navsari, District Surat, The Gaekwar of Baroda had founded a music school in Navsari as early as 1892. That school was closed by the Bombay Government in 1953 after the integration of the Baroda State with the Bombay State. Therefore, the people of Navsari re-started the school in 1955. The object was to create a taste for scientific music and spread its knowledge among the people. It is registered and recognised by the Government. About a hundred students take its advantage.

The Narmad Sahitya Sabha, Surat.

A Gujarati literary society was founded in 1923 which was named as The Gujarati Sahitya Mandal, Surat. It organises public lectures of renowned poets and authors, holds *Kavi Sammeans*, *Mushayaras*, meetings celebrates centenaries and anniversaries of men of letters in Gujarat, holds examinations of literary study and organizes elocution competitions.

The Mandal's name was changed in 1939 to The Narmad Sahitya Sabha, Surat, to commemorate the name of the distinguished poet, patriot and reformer of Gujarat, Narmadashankar Lalshankar, who belonged to Surat (1833-1886).

The Rotary Club, Surat.

The Rotary Club, Surat, was founded in 1937. The club renders useful social service when there are floods, famines etc.

In 1948, it started a free library at village Umra, and late., a community service and cultural centre at the same Umra Village It also co-operated, in 1955, in organising a rural medical relief committee and worked through it in villages for the relief of the poor and the needypersons. Four medical camps were conducted in villages.

The Surat Tennis Club, Surat.

The Surat Tennis Club, Surat, popularly known as the Mehta Club, was started in 1910. It is situated on Dumas road in Athwa Lines. The Club building was constructed in 1938. There are two tennis courts and a closed badminton pavilion put up at a cost of Rs. 18,000.

Membership of the club is open to all persons, irrespective of caste, creed or nationality. If provides facilities for tennis, badminton, billiards, table-tennis, and card games. Every year it organizes open tennis tournaments for Surat and Broach districts, and open badminton tournaments for Surat.

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PART VI

CHAPTER 20–PLACES OF INTEREST

ARṆĀI.

Arṇāi (Dharampur T. 25° 35′ N, 73° 10′ E; p. 465), about nine miles south of Dharampur has a hot spring.

BĀLPUR.

Bālpur (Vyārā T. p. 1,062), has a temple of Kapileśwar Mahādev, where a fair is held annually on Mahāśivarātri, i.e. on the fourteenth day of the darker half of the month of Mahā. The sanitary arrangements are made by the village *panchayat.*

BĀNSDĀ

Bānsdā (20° 45' N, 73° 20' E; p. 4,455), the headquarters of Bānsdā taluka, is seven miles from the Unāni railway station on the Bīlīmorā-waghai line of the Western railway. Being the capital of the old Bānsdā State, there are several amenities in this village which are not usually found in such small centres of population. It has a clock tower and a spacious town hall, where the Mamlatdar's *kacherī* is now located. A weekly bazar is held in the town every Friday. The village has electric supply and a good water works, both provided by Government. The civic affairs of the village are managed by a village panchayat. The palace of the former Chief is situated in the north-western part of the town, on the banks of the Kāverī, and is known as Digvir Nivās Palace. Adjacent to the palace is a well-equipped public club building, also on the river bank. There are two guest houses of the Chief called Devendra Bhuvan and Suśīl Sadan. There is also a Government dispensary, a high school, two rice mills and two saw mills.

BĀRDOLI

Bārdolī (21° 05' N, 73° 05' E; p. 9,846) is the headquarters of Bārdolī taluka and a large agricultural village. Bārdolī railway station is on Surat–Nandurbār railway line 20 miles from Surat. It is now connected with Surat by a cement concrete road. A bridge over the Miṇdholā river near Bārdolī was completed in 1955 on Surat-Dhuḷiā road by which the southern and south-western portion of the taluka has now an early access to the taluka head-quarters. It has an ancient temple of Kedāreśwar Mahādev at a distance of a mile and a half.

Bārdolī has at present five ginning and pressing factories and two oil mills. Two of the ginning and pressing factories are being run by the agriculturists on a cooperative basis. A new sugar factory is also under erection (1956) with a capital of Rs. 75 lakhs of which Rs. 20 lakhs were raised by local shares, 10 lakhs shares were purchased by the State Government and Rs. 45 lakhs given as loan by the Central Government.

It has a large cultivated area under cotton. Export of plantains is another big business of the agriculturists, which is also run on co-operative basis.

The Kākarāpār canal with a total length of 800 miles runs in the margin portion of the taluka from the north-east corner.

There is a full fledged high school in the village. Bārḍolī has also a power-house run on a co-operative basis, which is associated with the name of the Sardār Vallabhbhāi Paṭel.

The Svarāj Āśram here has become a place of pilgrimage for the people of India.

Distinction of People

The people of Bārḍolī village and taluka are a splendid lot of citizens. Quite a considerable number of Mahātmā Gāndhījī's *Satyāgrahīs* in South Africa were from Bārḍolī and they had, during that historical struggle, given enough evidence of their courage and determination. It was this familiarity with the *satyagrahīs* of Bārḍolī that led Gāndhījī to approve Bārḍolī as a suitable area to experiment on mass civil disobedience in 1921-22, but that, after two or three postponements was ultimately given up. But in February 1928 a no-tax campāign was launched by the people of Bārḍolī at the initiative and under the leadership of the late Sardār Vallabhbhāi Paṭel as a protest against the increase of assessment notified by the then Government after a defective inquiry conducted by a settlement officer. The campaign was continued till August 1928, when Government appointed a committee composed of one judicial and one executive officer, which went into the matter and decided that not more than 6¼ per cent should be the measure of enhancement. The credit of the settlement lay in the return of the sold-out lands to their owners and the restoration of the *patels* and the *talāṭis* (who had resigned) to their jobs.

BILIMORĀ

Bīlīmorā (Gaṇdevi peṭa 20° 45' N, 72° 55' E; area 2.2 square miles; p. 16,669), about 13 miles from Navsārī and 132 miles from Bombay, is a rising minor port on the bank of the river Ambikā, a navigable river. It is also a railway station on the Bombay-Surat line of the Western Railway. It is an outlet for the products of the rich Dāṅgs forests to which it is connected by a 40-mile narrow gauge line running up to Wāghāi. The products of the Dāṅgs forests imported through this railway line are exported to various other centres either by sea, by country-craft or by the main Bombay-Delhi railway line. The value of the sea borne trade of the port during 1954-55 amounted to Rs. 40,71,375 (exports Rs. 37,45,985 and imports Rs. 3,25,390). It is also a small industrial area having a chocolate factory, a candle works a tile factory, a saw mill, pottery, brick works and flour, cotton textile, rice and silk mills. It is famous for its ivory and sandalwood works. Small shops and wooden casks are also manufactured and a considerable amount of castor oil is pressed.

According to the census of 1951 the agricultural population in the town numbered 222, and the non-agricultural 16,447. Of the latter 7,881 persons derived their principal means of livelihood from production other than cultivation; 4,014 persons from commerce; 551 persons from transport; and 4,001 persons from other services and miscellaneous sources.

Civic affairs

The civic affairs of the town are managed by a municipality. Established by the Barodā State Government during pre-merger days, it is now governed by the Bombay District Municipal Act (III) of 1901. The municipal council is composed of 23 members elected from nine wards in to which the town is divided for purposes of election. Of these 23 seats, two are reserved for women and four for the scheduled tribes. Besides the managing committee, the municipality every year appoints two executive committees, viz., the sanitary committee and the public works committee, each consisting of seven members. There is also a schools committee, composed of five members from the municipality and one from the women of the city. In 1954-55, the municipality had an income of Rs. 3,89,798, exclusive of extraordinary and debt heads. This was composed of municipal rates and taxes, Rs. 2,96,497 (of which octroi amounted to Rs. 1,26,834 net); realization from special Acts, Rs. 1,815; revenue derived from municipal properties and powers a part from taxation, Rs. 54,197; grants and contributions, Rs. 27,995; and miscellaneous, Rs. 9,294. The expenditure in the same year amounted to Rs. 3,90,192 (exclusive of extraordinary and debt heads) distributed as follows, viz., general administration, Rs. 1,67,588; public safety, Rs. 17,548; public health and convenience, Rs. 1,47,506; secondary school Rs. 38,280; aid to public institutions, Rs. 2,800; and miscellaneous, Rs. 16,470. The municipality had a loan liability of Rs. 34,500 at the end of the year 1954-55.

In 1954-55 there were 3,621 houses in the town, the total rental value of which was Rs. 7,07,832.

There is no water supply through pipes. There are only two wells of fresh water and most of the residents use the water of these wells. These wells are often treated with potassium permanganate. There are about 44 other wells, the waters of which are brackish and, therefore, not useful for drinking purposes. There is no drainage system, but in the low lying area the municipality has constructed some underground gutters. The sullage as it is received from the houses is carried through the gutters directly to the river without being treated. The effluent is carried away by tidal waters. The municipality maintains three trailer fire-fighters, which, at the time of fire, are operated by mechanics with the help of two drivers of the sanitary department. Two motor tankers are also used in case of fire for fetching water from wells.

The primary education of the town is managed by the Surat District School Board, the municipality contributing its statutory

CHAPTER 20.

Places of Interest.

BILIMORA

share of the expenditure. The municipality manages a secondary school known as Mancharjī and Ratanjī Ṭāṭā High School, the building for which had been provided by two Ṭāṭā brothers Mancharji and Sāpurjī. The school was formerly managed by the Baroḍā Government. There were 343 pupils in this school in 1954-55. There are two libraries in the town managed by public trusts, to which the municuipality gives financial aid every year to the extent of Rs.350. The municipality maintains eight miles of road two and a half miles of which are cement concreted. The lighting of the city is done by 255 public lights. It also maintains one vegetable market, one fish and mutton market and one slaughter house. At four different places of the town playgrounds are maintained by the municipality. The municipality also maintains a *dharamshala* named Jivaji Rupāji Dharamshālā.

There are two burial places in the town, maintained by Shia and Sunnī Mahomedans. One cremation ground is maintained by the Hindu community. There is also a tower of silence built by the Parsi panchayat for the reception of the dead bodies of Pārsīs.

BODHAN

Bodhaṇ (Māṇḍvī Taluka 21° 15' N, 73° 05' E, p. 4,017) is a place of Hindu pilgrimage. A fair is held here when Jupiṭer enters the constellation of the Lion, an event which happens every twelve years. About 2,000 people are estimated to attend on each occasion. The temple at Bodhaṇ contains the image of Gautameśvara Mahādev in whose honour the fair is held. This temple holds devasthān inam land measuring16 acres and 21 gunthas in area assessed at Rs. 38-13-0. The minister of the temple is a Tapodhan, whose receipt exclusive of the yearly revenue from the temple lands, amount on the occasion, to about Rs. 300. The majority of the visitors are from the districts of Surat, Broach, Ahmedābād and Baroḍā On the occasion of the fair about Rs. 1,000 worth of goods, chiefly coarse cloth, toys and articles of food, are estimated to change hands. The fairs at Bothan have as far as is known, been free from any outbreak of cholera. A sanitary Inspecctor of the District Local Board with three gangmen looks after the sanitation for the fair. There is also a village Pañchāyat at Bodhaṇ.

BULSAR

Bulsār(20° 35' N, 72° 50' E; a.2. 07 sq. miles, P. 25,440), also known as Valsād, is a municipal town about 40 miles south of Surat and 115 miles north of Bombay. There are two rivers,' the Auraṅgā and the Vāṅkī. passing by Bulsār at short distances. The Auraṅgā is a navigable river and Bulsār's port Furgā Ovārā is at the mounth of this river. There are to other rivers near Bulsār, the Khārerā on the north and the Pār on the south. Bulsār is also a big railway station on the Western Railway line between Bombay and Surat, from which charcoal, grass, mangoes, fuel and firewood are exported. The National Highway No. 8 passes through the heart of the town. A state highway is also proposed which will pass through the villages of Aṭāk Pārdi, Abrāmā and Dhāmḍāchi etc. of Bulsār taluka. There is also a state highway

passing through the villages of this taluka and the Dharampur taluka, Bulsār, is therefore, well placed for trade by sea and land. The exports through sea are timber, grain molasses, oil, firewood, tiles, etc. The timber brought from the Dāngs forests is exported by sea to Dholerā, Bhāvnagar and other ports of Saurashtra.

The Arabian sea is only four miles from the Bulsār town. Near the sea is Tithal, a health resort where there are numerous bungalows. This village is separated from Bulsār by the river Vānkī. It is situated in the vicinity of the sea where the climate is agreeable throughout the year. People of means from Bombay, Ahmedābād, Surat etc., belonging to all communities visit this place especially during summer. There are bungalows built by rich Pārsees and Hindus. There are no buildings or *dharamśhālās* available for visitors on rent, except one Ṭāṭā-Bāg meant for employees of the Ṭāṭā concerns. Any employee without any distinction of caste, creed and colour is permitted to stay.

The historical Pārnerā hill is only four miles from the town. Just behind this hill is an important industrial area where two important concerns viz., Atul Products and Lederle Ltd. have established pharmaceutical factories. Atul Products manufacture also synthetic colours. Both the raw material required by these concerns and the finished products to be marketed by them pass through Bulsār. In the neighbourhood of the town is a good mango-growing area and the mangoes produced there and in other parts of the Bulsār taluka are exported through Bulsār. Bulsār is one of the district head-quarters of the Western Railway. There is a big railway workshop employing more than 1000 people. The State Road Transport Corporation has its District Office at Bulsār.

There is a sanatorium, called Zaverī Sanatorium at Bulsār where people from Bombay and other places come for change of climate. Only a nominal rent for the occupation of rooms is charged by the management.

According to the census of 1951, the agricultural population in the town numbered 1,088 and the non-agricultural 24,352. Of the latter, 6,662 persons derived their principal means of livelihood from production other than cultivation; 5,735 persons from commerce; 3,174 persons from transport and 8,781 persons from other services and miscellaneous sources.

The civic affairs of Bulsār are administered by a municipality established in 1855, and now working under the Bombay District Municipal Act (III) of 1901. The municipal council is composed of 26 members, all elected from seven wards into which the town is divided for purposes of election. Five of the seats are reserved for the scheduled tribes, and three for women. While one seat

is provided for the scheduled tribes in each of the Wards I, IV & V, Wards II & III elect one member in rotation and Wards VI & VII another. As regards seats reserved for women, the Wards are grouped for rotation as follows :—I, II, & III; IV & V; and VI & VII. During 1954-1955 the municipality's income, exclusive of extraordinary and debt heads, was Rs. 5,12,062 composed of general property tax, Rs. 73,946 ; sanitary cess (general and special) Rs. 26,095; wheel tax, Rs. 9,760; octroi (less refunds), Rs. 2,87,891; toll, Rs. 20,768; entertainment tax, Rs. 325 revenue derived from municipal property and powers apart from taxation, Rs. 36,408; miscellaneous, Rs. 4,133; and grants and contributions, Rs. 52,736. The expenditure of the municipality during the same year was Rs. 3,82,007 and capital expenditure Rs. 1,10,637. The ordinary expenditure was composed of general administration and collection charges, Rs. 78,488; public safety (i.e. fire and lighting) Rs. 16,619; public health and convenience Rs. 2,09,896 (including public works Rs. 1,05,102); public instruction Rs. 66,698, and contributions Rs. 2,846; and miscellaneous, Rs. 7,460. In 1954-55 there were 4,645 houses in the municipality, whose annual rental value was estimated at Rs. 11,17,124.

The control of primary education in the town rests with the Surat District School Board, the municipality making its statutory contribution towards the expenditure. There are three high schools and one secondary middle school in the municipal area of Bulsār all under private management.

There is no system of piped water supply to the town. A water supply scheme costing Rs. 32,19,719 has been prepared The source of supply is the river Auranga. The plan is to build a masonry weir in the river bed near the temple of Ghaḍoi, five mies upstream from Bulsār. The scheme which includes storage tanks, filters, chlorination, pipes etc. is expected to be taken up for execution shortly. Connected with this supply scheme is also a drainage scheme estimated to cost Rs. 15,37,784. The latter scheme is now under consideration by the Board of Health.

The municipality maintains a fire-fighting service which is in charge of a mechanic. The other staff consists of two motor drivers and two cleaners. In case of fire, the scavengers also give valuable service. The equipment consists of (1) three hand-machines by which water can be pumped from wells and be spread over to extinguish fire; (2) two petrol-driven fire-fighter engines and one pump attached to the road-watering trucks; (3) two watering tanks, which are also used in road waterings; (4) seven pieces of hosepipes each 50 ft. in length; and (5) other miscellaneous equipment e.g. ladders, etc.

The municipality maintains three markets, one each for vegetables, mutton, and fish. There is also a municipal slaughter-

house. The municipality also owns the Sardār Vallabhbhai Paṭel Memorial Market Building. The ground floor of this building is a public market where stalls are given for occupation by various traders. The whole of the first floor is used for housing municipal offices. A clock tower forms part of the building.

The municipality maintains 14 miles of roads in the town. A small length of 410 feet is concreted; six miles and one furlong are asphalted; and six miles and one furlong are metalled. All metalled and *Katchā* roads are watered in fair seasons to eliminate the dust nuisance. The municipality has provided electric lighting on public streets. There are also 28 mercury vapour lights. It runs a public dispensary and also maintains a maternity home. Anti-malarial measures are in operation in the town to remove the mosquito nuisance. There is a veterinary dispensary on the Mahātmā Gāndhī Road, managed by the Government.

The central hall of the old municipal office building now houses the Mahātmā Gāndhi Sārvajanik Pustakālaya which has been established by the municipality and is maintained by it. There are three other libraries viz., Shri Vidyāmrut Varśinī Pāthśhālā Library, and Avābai Library, which are open to the public, and the Railway Library meant only for railway employees.

The municipality also maintains a public garden known as the Kalyāṇ Baug, named after Shri Motīlāl Kalyāṇji Seth who donated more than Rs. 20,000 towards the lay-out of this garden.

Lectures on religious, educational and social affairs are arranged and social functions and gatherings are held at the following places viz., Gīṭā Sadan Hall, Vidyāmrut Varśini Pāthśhālā Hall, Bejān Bāug, Arya Samāj Hall, and Mūni Āśhram.

There is a Public Works Department travellers' bungalow in the town and another at the village of Tithal, the health resort.

There is a branch of the Akhil Hind Mahilā Pariśad which carries on activities relating to childrens' education, womens' education, arts and culture, and improvement of the status of women.

There is one *sadāvrat* maintained by Sheṭh Motīlāl Kalyāṇjī in the name of his father Shrī Kalyāṇji Harjīvandās, from which beggars and persons with defective limbs are supplied food-grains (*khichḍi or āṭṭā*).

There are in all eight burial grounds within the town. Two are private, at Kāzīwāḍ and Rośānāthī. One is the 'European cemetary; one is for Bohorās, one for other Mohammedans and one for Harijans. The other two are at Moṭā Tāiwād and Nānā

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Tāiwād. The cremation place is situated outside the municipal limits on the east of the town on Kailās road on the bank of the Auranga. All Hindus, including Jains, use this ground. Excellent arrangements exist to supply water and to drain away the waste. There is a small garden around the place and a *dharmśhālā* near it. An electrical grid power-house has also been erected at village Āṭak Pārḍī of this taluka, about three miles away from Bulsār, and it is to supply electricity to the villages for lighting as well as power for driving agricultural machinery.

DHARAMPUR

Dharampur (20° 32' N, 73° 13' E; p. 5,096) headquarters of Dharampur taluka, is 17 miles east from Bulsār railway station on the Bombay-Surat line. It was the headquarters of the Dharampur State before that State was merged in the Surat district in 1949.

According to the census of 1951, out of the total population of 5,096, the agricultural population numbered 506 and the non-agricultural 4,590. Of the latter 1,015 persons derived their principal means of livelihood from production other than cultivation, 884 persons from commerce, 38 persons from transposrt, and 2,653 persons from other services and miscellaneous sources.

The civic affairs of the town are managed by a municipality. Established by the Dharampur State in 1917, it has come to be governed by the Bombay District Municipal Act. 1901 since the merger of this State in the Surat district in 1949. The municipal council is composed of eleven members of the eleven seats, one is reserved for the scheduled castes and one for women. Besides the managing committee, the municipality every year appoints two executive committees, viz., the sanitary committee and the library committee. In 1954-55, the total income of the municipality (excluding extraordinary and debt heads) was Rs. 57,003, composed of house tax, Rs. 4,142; octroi Rs. 24,244 ; toll, Rs. 5,371; wheel tax, Rs. 750; special sanitary cess, Rs. 3,348; general sanitary cess Rs. 558; lighting tax, Rs. 616; cinema, Rs. 133; and miscellaneous, Rs. 17,841. The total expenditure (excluding extraordinary and debt heads) was Rs. 45,043, composed of establishment, Rs. 21,464; contingency, Rs. 468; printing, Rs. 695; travelling, Rs. 82; library, Rs. 630; *chandi* (horse feed), Rs. 948; fodder, Rs. 1,218; street light, Rs. 5,739; bulbs, Rs. 220; and miscellaneous, Rs. 13,579. There is compulsory primary education enforced in the town. The primary schools are managed by the Surat District School Board. The chief source of water supply for the town is wells. There is a small water works managed by Goverment, but it supplies water only to a few houses. There is ample open space attached to almost all the houses, and the drainage water soaks in the ground. To serve the heart of the town, however, where disposal of drainage water is not possible, there is a small *puccā* built drainage.

The municipality maintains a fire fighter, but there is no special establishment to maintain it. There are nearly six miles of metalled roads in the town, one furlong of which is also asphalted. There are both a human dispensary and a veterinary dispensary maintained by Government. There are no burial or cremation grounds maintained by the municipality, but there are two burial grounds, one for Hindus and the other for Muslims, maintained by private institutions of the respective communities. Objects of interest in the town are the palace of the former Chief and a museum. The latter was established in 1928 by the Mahārāja. It contains specimens of dead wild animals stuffed and mounted so as to give them the appearance, attitude, etc. of living animals, old pottery, musical instruments; etc.

GANDEVI.

Gandevi (20° 45' N, 72°, 50' E; p. 8,384, area 2.9 square miles) is a municipal town on the Bīlīmorā-Waghāi Railway line and the headquarters of the Gandevi peta. It is situated on the bank of a small stream called the Vengania at a distance of about ten miles from Navsārī and three miles from the Amalsād railway station. Though Gandevī was once a well-known commercial centre, it has lost its commercial importance on account of the rise of Bilimorā on the one hand and Amalsād on the other, they being important railway stations. It was once famous for calico printing and the handloom industry. Calico printing is slowly dying out, but the handloom industry is still flourishing grains, castor and oil seeds, *gul* and *ghee* are imported here from Nandurbār, Bansdā and other places in the interior and are exported to Bombay by sea or railway. *Saris* and *Khadi* are manufactured on handlooms. There is a tiles factory in the town.

According the census of 1951 the agricultural population in the town numbered 433 and the non- agricultural 7,951 . Of the latter 3,670 persons derived their principals means of livelihood from production other than cultivation; 1,887 persons from commerce; 148 persons from transport; and 2,246 persons from other services and miscellaneous scources.

The civic affairs of the town are in charge of the Gandevi municipality. It was established in 1882 as an A class municipality under the former Barodā Government. Before the merger of the town in the Surat district (July 1949) the president of the municipality was the Assistant Collector of Navsārī prānt At present it is governed by the Bombay District Municipal Act (III) of 1901. The municipal council is composed of 15 members all elected from seven wards into which the town is divided for electoral purposes. The president is elected by the municipal councillors from among themselves. Two of the seats are reserved for women and one for the scheduled tribes. Besides the standing committee four other committees are elected by the municipality to look after public works sanitation octroi and lighting.

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In 1952-53 the income of the municipality (excluding extra-ordinary and debt heads) amounted to Rs. 96,850 composed of octroi Rs. 25,652 tax on houses and lands Rs. 28,652; tax on animals and vehicles, Rs. 653; tax on roads and ferries, Rs. 6,308; other taxes, Rs. 9,846; realization under special Acts, Rs. 319. revenue derived from municipal properties and powers apart from taxation, Rs. 8,935; grants and contieutions, Rs. 16,139; and miscellaneous Rs. 346. The total expnditure in the same year (excluding extra-ordinary and debt heads) totalled Rs. 76,935, composed of general administration and collection charges, Rs. 13,419; lighting, Rs. 10,074; reward for destruction of wild animals and snakes, Rs. 707; water supply (capital outlay), Rs. 2,940; conservancy and public health, Rs. 35,003; public works, Rs. 8,303; and miscellaneous, Rs. 6,489. There is neither a drainage system in the town nor municipal water works. There is also no fire-fighting equipment maintained by the municipality. All the roads in the town are metalled and the main road is asphalted. Compulsory primary education in the town is managed by the Surat District School Board, the municipality contributing its statutory share of the expenditure. The municipality maintains a park where special facilities are provided for children. The cremation and burial places are located outside the municipal boundaries.

KĀMREJ.

Kāmrej (21° 15' N, 72° 50' E; p. 1,765), a village situated on the south bank of the Tāpī river and eight miles east of the Sayāṇ railway station on the Bombay-Delhi line, is the head-quarters of the Kāmrej peta. There are three temples of architectural interest in this village, all situated on the banks of the Tāpī. One is dedicated to Nārad Brahmā. The idol of Nārad Brahmā, placed within a shrine in the subterranean valt of the temple, is made of stone and is an excellent specimen of ancient art, perfect in design and execution. The second is of Koṭeśwar, and the third of Mokśanāth Mahādev The temple of Mokśanāth attracts pilgrims from very distant parts of the country who perform the ceremony of Nārayāṇ Nāgbāl and Tripiṇḍi. It is mentioned in Tāpī Purāṇ and tradition relates that there once grew a *pīpaḷ* tree (Ficus religiosa) opposite this temple bearing golden leaves. On the outskirts of a village named Bhāviār, at a distance of about half a mile to the north of Kāmrej is an ancient temple of Kālabharairav. The tradition is that there was here once an image of the human likeness of the deity to whom the temple was consecrated which was enshrined in a subterranean vault, but that a mad man broke it to pieces at a blow. A piece was afterwards taken into the temple, and placed there with consecrating rites by one Rudrājī Girnājī, a local Government officer about 200 years ago.

KAṬHOR.

Kaṭhor (Kāmrej peta; 21° 15' N, 72° 55' E; p. 5,624, including 521 of the non-village panchayat area), is a large village on the northern bank of the Tāpī three miles from Sāyaṇ railway station on the Bombay-Delhi line and ten miles from

Surat. The Musalmān resident of this village, who form more than half of its population, are enterprising. They repair to Mauritius, Singāpore, China and other distant places, where they stay for years together, return after amassing sufficient wealth and settle down at home. Grain, *surangi* and calico printed or coloured cloth are the principal articles of trade. The brinjals (*solangum ovigerum*) raised in the vicinity of the town are known for their softness and agreeable taste, and are largely exported to Surat and other places where they fetch comparatively higher prices.

MAHUWĀ

Mahuwā (21° 00' N; 73° 05' E; p. 2,133), the head-quarters of the Mahuwā taluka, is a small village on the river Purṇā. It is about nine miles from Bārḍolī, which is the nearest railway station for it on the Tāpī Valley Railway.

MĀṆDVI

Māṇḍvī (21° 15' N, 73° 15' E; p. 7,479), on the banks of the Tāpī river, is the headquarters of the Māṇḍvī taluka. It is nine miles from Maḍhī railway station (on the Surat-Bhusāval line) and 27 miles from Kīm (Bombay-Delhi line). The roads from Maḍhī and Kīm to Māṇḍvī are *pukkā* cement roads. Situated at a distance of one mile from the town is a big agricultural farm, called Sindhwāi Farm, which consists of 800 acres. Attached to this farm is a dairy. A big bridge estimated to cost 20 lakhs of rupees is now (March 1956) under construction over the river Tāpī, joining Maḍhī-Māṇḍvī road and Maḍhī-Kīm-Zaṅkhvāv road, which are both State Highways. The Kākrāpār irrigation dam is situated five miles from Māṇḍvī. There is a human dispensary and also a verterinay dispensary run by the Surat District Local Board in Māṇḍvī town.

MĀṄGROL

Māṅgroḷ (21° 25' N, 73° 00' E; p. 2,911), the headquarters of the Māṅgroḷ taluka, is a railway station (Moṭā Mīyā Māṅgroḷ) on the Kosāmbā Umarpāḍā railway line of the Western Railway. There is a *dargāh* of a saint called Hajrat Moinuddin Christi *alias* Moṭā-Mīyā who lived there about 230 years ago. There is a human dispensary and also a veterniary dispensary. There are also two ginning factories.

NĀDHAI

Nādhai (Chikhālī, T. p. 789) is an old village of Dharampur State, now in the Chīkhalī. taluka, situated on the high level near the bank of the river "Auraṅgā". It is at a distance of 12 miles from the head-quarter Chīkhali There is a shrine of God Shiva known as "Gupteśvar Mahādev" built just near the bank of the river. The temple being in a lonely place surrounded by green trees presents an enchanting view to the visitors from the opposite bank of the river. It is at least 150 yars old. There is a legend prevalent amongst the people of this area that there was a *shivaliṅg* hidden in the groves of green trees. In the past one Kālīparaj (Dhodiā) believing that the said *ling* was a God incarnate began to go there

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and worship it. Thereafter, some years ago one deceased Dhodiā (Vallabhbhāi Vajīrbhai) of Khergām saw this *ling* in his dream and constructed the temple at this place and a *kuṇḍ* of Gaṅgājī in the river. As the *ling* was hidden. the god Śiva is now known as "Gupteśvar". In course of time this temple became famous and prominent in this area. and His Highness the Mahārājā of Dharampur State used to vistit it every year on the Mahāśivrātri and other religious occasions. For the last fifteen years 40,000 to 50,000, mostly Kālīparaj (Ḍhoḍiā), gather here on the fair days (two days during Mahāśivrātri). This lonely place is then really converted into a small town with shops dealing in varieties of daily life.

Some humming sound is sometimes heard coming out automatically from the *Jaldhāri* (flow of water) watering the *ling* overhead. This sound in the temple is very curious and unnatural and the people round about believe that this is divine voice. Even Śri Śaṅkarāchārya and other sages who visited this place are said to have been of the opinion that this voice was that of some sage, who had taken *samādhi* under neath. There is a deep pit near the *gaumukh* (face of Cow) just near the river bank and it is said that in the past pearl-shells were found round about the village and people who picked them up sold them.

NAGAR

Nagar (Dharampur T., (20 ° 35' N, 72 ° 50' E); p. 354) known also as Rāmnagar, is a small village 40 miles to the east of Bulsār railway station. It was the ancient capital of the Dharampur State and was called Rāmnagar after the name of Rām Rājā who conquered the country from the Bhīls about 800 years ago. In 1576 the chief of Dharampur (or Rāmnagar) went to meet Rājā Ṭodar Mal at Broach and gave him Rs. 12,000 and four horses and was allowed to assume the rank of 1,500 horse and agreed to serve the Gujarāt Viceroy with 1,000 cavalry. Śivājī in his attacks on Surat (1664-70) was helped by the chiefs of Ghar and Rāmnagar. In 1672, paying a complimentary visit to the chief he took the fort of Rāmnagar saying that th must have the key of the treasure (Surat) in his own hands.

NAVSĀRĪ

Navsārī (20 ° 55' N; 72° 55' E; p. 44,663 a. 1.8 Sq. miles) is the headquarters of the Navsārī taluka. The latter formed part of the former Baroḍā State and as a result of the merger settlements effected in 1949 was transferred to the Surat district. Navsārī is situated 18 miles south of Surat and 147 miles north of Bombay. It stands at a height of 150 feet above sea level on the southern bank of the river Purṇā. Navsārī railway station is on the Western Railways line from Bombay to Ahmedābād. There are a few ginning factories and two cotton spinning and weaving mills in the town. There is also a big brassware factory. Excellent furniture is made in Navsārī and exported to Surat and Bombay.

Birth place of Dadabhai and Jamshedji.

Owin to its proximity to the sea, the climate of Navsārī is most enjoyable from the middle of April to the middle of June, as a mild breeze constantly cools the air. It is known as the *vilāyat* (chief home)of the Pārsīs and was the birth place of the well known patriot Dādābhai Naorojī and the renowned industrialist Jamśedjī Ṭāṭā.

The first settlement of the Pārsīs in Navsārī took place in 1142 A. D. the town being then a feudal village under the sway of the Mohemmedan emperors of Delhi. The *dasturs* (high priests) and *desais* were constantly in communication with the Delhi court, and Pārsī *desais* collected the Muhammadan revenues. Five centuries ago one of these, Changā Aśā, got the *desāigirī* of Navsārī and of the Parchol pargaṇa. On failure of his heir the office was conferred on Dastur Kekobādjī Meherjī Rāṇā. This person and his father had both been to Delhi and obtained grants of extensive *vajifā* lands (300 bighas). In 1700 Temujī Rustamjī went to Delhi and obtained the post of *desai*, and in 1720, when Navsārī was groaning under the tyranny of Rustam Alī Khān, Nawāb of Surat, he induced Pīlājīrao Gāekwāḍ to come from Songaḍh to Navsārī. For this act he was imprisoned by the Nawāb of Surat, but was subsequently released by Pīlājīrao. The same prince conferred on his son Kharśedjī the office of *desāi*. Kharśedjī's son Mancherjī rendered service to the British by aiding Mr. Duncan, the Governor, of Bombay, to treat with Govīndrao Gāekwāḍ in 1800. He then received the British guarantee. In 1802 he assisted in bringing about a treaty, and for this in 1817 he received from the Court of Directors a pension of Rs. 200 a month. His son Jamsetjī was highly favoured by Sayājīrao Gāekwāḍ, who termed him his *nāhanlā bhai*, (younger brother). There was a dispute among the priests of Navsārī which lasted over three centuries. In Samvat 1790 the two parties came to blows. and the Gāekwāḍ had to intervene and assign to each his duties; the Kakaliās were to care for the dead, the Bhagāriās for the living.

According to the census of 1951, the agricultural population in the town numbered 1,586 and the non-agricultural 43,077. Of the latter 15,881 persons derived their principal means of livelihood from production other than cultivation; 9,367 persons from commerce; 1,353 persons from transport; and 16,476 persons from other services and miscellaneous sources.

The muncipality of Navsārī was established in 1865 during the Baroḍā State regime and was under the control of the Subā (Collector) of the district until 1906, when it was made an independent body composed of both elected and nominated members with the Subā as ex-officio president. In 1924, it was given the right to elect its own president. When Baroḍā State was merged in Bombay State on 1st August 1949, the Navsārī municipality came to be governed by the Bombay District Municipal Act (III) of 1901. From 1st May 1950 it was turned into a borough municipality and came to be governed by the Bombay Municipal Boroughs Act (XVIII) of 1925.

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The municipal area is divided into ten wards and each ward returns three members to the municipal council. Of the 30 seats, three are reserved for women, two for the scheduled castes and three for the scheduled tribes. The Chief Officer is the head of the administration and he has over 300 persons working under him as subordinate staff. Besides the standing committee, which is a statutory body, there are six other elected committees for each of the following subjects, viz., (1) public works., (2) sanitation, (3) water works, (4) drainage, (5) law, (6) fire brigade and lighting.

Navsārī has piped water supply since 1927. The water works is situated in the southern outskirts of the town. The source of water is tube wells supplied by underground springs located 200 ft. below the ground level. There are about 4,000 house connections and 120 public stand posts. A scheme is being executed to increase the supply from ten lakh gallons to eighteen lakh gallons per day.

There has been underground drainage for the town since 1933. At present only waste water is carried through the drainage which was constructed with a view to utilizing it for flush latrines. A new scheme for sewage disposals, costing Rs. 9, 93,000, has been sanctioned and is expected to be completed by 1959. The town has electric lighting, A V-8 fire-fighter, 1 Chevrolet fire engine, a President Model Dodge fire-fighter and a trailor pump constitute the fire-fighting equipment of the town. This equipment is manned by a Fire-Brigade Superintendent, 3 drivers and 10 *khalāshis*. Generally minor fires, 10 to 15 in number, occur every year. In 1954-55 two big fires occurred in the industrial area of the town, one in a saw mill resulting in a loss of Rs. 60,000 and the other in a bobbin factory resulting in a loss of Rs. 40,000. There are 24 miles of road maintained by the municipality, of which 6 miles are asphalted, 6 miles are metalled, and 12 miles are of gravel. The main roads are 25 to 30 ft. in width and the lanes are 8 to 12 ft. wide. The municipality has built two vegetable markets, three mutton markets, two fish markets and one slaughter-house.

There is compulsory primary education in the town. The primary schools are under the control of the Surat District School Board. The question of the statutory contribution of the municipality towards the cost of primary education is now under consideration by Government (June 1956). There is an arts and science college in the town called after the name of Sorābjī Burjorjī. There are three high schools for boys and girls and two other high schools exclusively for girls. In addition there are two Anglo-vernacular schools, also a technical high school. Apart from primary schools in Gujarātī, six for boys and two for girls, there are two primary schools in Marāṭhī and one in Sindhī. Government maintains a dispensary and has a Civil Hospital under construction. Besides these there are open to the

public the Parsi General Hospital, the Maroliā Maternity Hospital, the Sārvajanik Dispensary and the Kshatriya Sārvajaanik Dispensary. Exclusively for Pārsi there are the Pārsi Maternity Hospital and the Pārsi Infirmary. There is also a Government veterinary hospital.

There are three public libraries in the town, viz., (1) Sayājī Vaibhav Library, (2) Maher Rāṇā Library and (3) Śāntābai Library. Of these, the Meher Rāṇā Library opened in 1872, is the oldest.

Town hall with Clock Tower,

There is a town hall built in memory of Laxmaṇ Jagannāth and a clock tower. There is an excellent sanitorium for Pārsee endowed by Bai Ratanbai Eduljī Bāmji, and situated on the cool and breezy Lunsī Kui side. There is a rest house called Dasturwāḍī bungalo provided by Government for Government officers. There is a public garden near the railway station.

There is one large Pārsi fire-temple, Ātas Beharām, and there are five smallerall *agiāris*, plain buildings. The first fire temple is said to have been erected on the spot where the larger temple now stands, that erected by Desai Kharśedjī and consecrated by Dastur Sorābjī Rustomjī in 1765, and hither all the young Mobeds from Bombay and elsewhere are sent for confirmation or to receive the apostolic succession of their order. Mr. Burgess adds that, when Dr. Fryer visited India in 1675, he saw a fire-temple in Navsārī to which the sacred fire brought from Persia had been conveyed from the Bansdā jungles after the troubles in the time of Mahammad Begaḍā. It is also said that the sacred fire originally moved from Sanjaṇ to Navsārī was, owing to some disputes among the priests, secretly carried away by some of the order in 1742 to Udvāḍā, a place thirty four miles south of Navsārī. There the fire still burns and Udvāḍā is consequently held in great respect by the Pārsīs. During the Papeṭī holidays (Aug-Sept) which lasts eight days, Pārsīs come from Surat, Bombay and even more distant places to visit the ancient fire-temples of Navsārī and Bilimorā.

The Hindus have a great many places of worship in the town. The chief temple of the Jains is that of Parasnath, which contains 24 images of that deity under his various names. Daily worshippers come to the temple, select one of the images as the especial object of their prayers, anoint it with milk or water or both, and make offerings of fruits and flowers. Special revrence is paid to the god during the eight days of the *Pachusaṇ* in the month of Bhādarvā (July-Sept). At this time it is of importance to be amongst the first of the worshippers, a privilege which is purchased by a large donation of ghee, or an equivalent in cash. The Jain priest, *yati* or *jati*, *gorji* or *Savaḍā*, and sometimes the head-priest, *śripuj*, who dwells in Surat, are then present to read the sacred books to the people.

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NAVSĀRĪ

Dargahs

There are two *dargahs* of *pirs*. One of the *pirs* is named Sayed Saadat. The old and more pretentious *dargah* to Sayed Saadat has its history. The saint, named Sayed Nurud Nur Muhammad, was an Arab, who with his sword spread the faith through Belavar Pātan, Jara Pātaṇ, and other regions. He at last came to Dhārāgarī near Nāj Mandal, Nāj Shai or Navsārī, then the abode of a Hindu *jogi*. The latter challenged him to put his sandity to the test, and the *jogi* and Sayed plunged into the neighbouring Sarbatia *Talāv* (tank) with the expressed intention of remaining there for forty days. The Sayed came out alive at the end of that time, but not the *jogi*. The Rājās who witnessed the miracle embraced the Muslim faith, and the Sayed was enriched by the ruler of Dhārāgarī with the *jogi* lands. The Sayed had foretold to his disciples that his body floating in a coffin would one day be brought to shore by the sea. One day coffin and body appeared on the shore at Jalālpur and were afterwards enshrined in the *dargāh*, there said to be 830 years old. Not only Muhammadans but Hindus and Pārsīs believe in the power of the saint to grant earthly blessings. Some years ago the yearly votive offerings amounted to Rs. 8,000; now they rearely exceed Rs. 800. The Government grant is Rs. 60 per annum. Another story says that the saint's prophecy concerning the reappearance of dead body was made on the occasion of his departure to Meccā on a pilgrimage after a domestic quarrel and affliction. He had long been married to a Rājput princess, when, one day, he fell into a dispute with her, which ended by his taking her nine miles out to sea and there casting her into the deep. The lady is honoured with a fair at Bībī Ajānī, a sea-coast spot in Jalālpur. The other *pir* is named Makhtum Shāh. Once a year, on the sixth day of Shaval a pilgrimage is made to these *dargāhs* by the Muhammadans of Surat and other places. A three-day fair is then held attended by people of all denominations to the number of about 5,000.

The cremation ground for Hindus is located on the bank of the river Purṇā about a mile north of the town. There are also two burial places for Muhammadans situated in the vicinity of the town.

Among the objects of interest in Navsārī may be placed the towers of silence, situated to the north on the banks of the Navsārī creek. There are four of them surrounded by a great wall, and the Golgothā is approached by a neatly kept raised path, at the town end of which is a commemorative arch. The last and largest of the towers was built in 1877-78 by Shri Nasarvānjī Ratanjī Ṭāṭā in memory of his mother Kuverbai.

The birth place of Jamshedjī Tāṭā, founder of the house of Ṭāṭās, is situated at Dusturwāḍī, and is preserved in its original condition.

The Dudhiā lake, situated at the southern outskirts of Navsārī s an ancient tank above 105 acres in area with Rām Ṭekrī (Rāma's hill) in the centre. On the west bank of this lake is an ancient temple of Āśāpuri.

OLPAD

Olpāḍ (21° 15' N ; 72° 45' E.) is the headquarters of Olpāḍ Taluka. At a distance of about four miles from the town is the temple of Siddanāth Mahādev. This temple is about eight miles west from the Tāpī river and is situated at a height of 104 ft. from the neighbouring plain. The *Śivliṅg* enshrined in it is about 18 inches in height and about 20 inches in circumference. It contains innumerable pores and water pours incessantly from a hole on the top of it. The temple which was in ruins was renovated by Dāmājīrao Gāekwāḍ, a district officer of Baroḍā State. In the south of the compound of the temple is a well, locally known as "Bāṇ Gaṅgā," because this well is believed to have been excavated by Śri Rāma in order to provide a bathing place for learned Brahmins from Benāras whom he had invited for a *vajna* he performed here at the instance of Rishī Gokarna at whose *āśhram* nearby he had halted on his return from Lankā after defeating Rāvaṇa. The management of the temple is entrusted to a committee of officials and non-officials. One of the legendary stories current about this temple says that on account of its miraculous powers the *Śivliṅg* has survived several attempts at its destruction by *Pinḍharis,* pirates and plunderers Big insects issuing from the ling are supposed to have attached the iconoclasts and made them flee.

PALSANA

Palsāṇā (p. 2,984) is the headquarters of Palsāṇā peta. It is situated on the river Minḍholā at a distance of nine miles from Navsārī. Two Hindu temples and a handsome tank are places of some interest. A rest house or *dharamshālā* is attached to one of the temples. There is a High chool in the town, which was started in 1955.

PARNERA

Pārnerā (Bulsār T. 20° 30' N. 72° 55' E ;) is a hill four miles south-east af Bulsār and 120 miles north of Bombay. It rises to a height of about 500 ft. above the plain. On account of its commanding position the summit of this hill remained fortified for a long time. Originally it was fortified by Hindus and the fort remained under the Rājā of Dharampur till it was taken about the end of the 15th century by Mahmud Begḍā, king of Gujarāt (1459-1511). The fort remained for some time under the charge of Musalmān commanders, but in the disorders that marked the close of the power of the Ahmedābād kings, it fell into the hands of a chief of banditti. According to the Portuguese writers Pārnerā was twice, in 1558 and 1568, taken by expeditions from Damaṇ, and on the second occasion the fortifications were destroyed. After it had been allowed to remain in ruins for more than hundred years, the fort was, in April 1676, taken and rebuilt by Moro Panḍit one of Shivāji's generals. For about a century Pārnerā remained under the Mahārāṭhās. It was then (1780) taken by a detachment of English troops under Lieutenant Welsh.

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At first, as a protection against the raids of Pindharis, the fort was occupied by a military party ; but early in the nineteenth century the garrison was removed, and during the mutinies of 1857 the fort was dismantled. Ruins of the fort are still found at the summit.

RANDER

Rānder (Chorāsī T. ; 21° 10' N, 72° 45' E ; area 3.3 square miles, p. 14,212) is situated on the right bank of the Tāpī about two miles above Surat. It is closely connected with Surat by a bridge over the Tāpī. Though but little is known of its history, Rānder is admitted to be one of oldest cities in southern Gujarāt. It is generally supposed to be the 'Rahanhour' which with Broach or 'Bahroudj' is by Al Biruni (1030) spoken of as one of the capitals of 'Lardeesa'. But some writers would give Rānder a much higher antiquity, and make it a place of importance, when, about the beginning of the Christian era, Broach was the Chief seat of commerce in Western India. Shortly after the beginning of the thirteenth century(1225) a colony of Arāb merchants and sailors is said to have settled at Rānder. These men attacked the Jains, who at that time ruled in Rānder, drove them out of the city, and converted their temples into mosques. Under the name of Nayakas they traded to distant countries and became famous for their wealth and hospitality. Of Rānder or 'Rānel' as he writes it, and its Nayakas, the traveller Barbosa (1514) gives the following details : 'Rānel' is a good town of the Moors, built of very pretty houses and squares. It is a rich and agreeable place, because the Moors of the town trade with Malacca, Bengal, Tawasery (Tenasserim), Pegu, Martaben, and Sumatra, in all sorts of spices, drugs, silks, musk, benzoin and procelain. They possess very large and fine ships, and those who wish Chinese articles will find them there very completely. The Moors of this place are white, and well dressed and very rich. They have pretty wives, and in the furniture of their houses have china-vases of many kinds, kept in the glass cupboards well arranged. Their women are not secluded like those of other Moors, but go about the city in the day time attending to their business with their faces uncovered as in our parts."

In 1530, after sacking Surat, the Portuguese general, Antonio de Sylvera, crossed the river to the city of Rānder (Reyner), a well fortified town of six thousand houses. The Nayakas, though said to be a 'race of more courage and policy than the Banians', fled at the first fire, leaving so much property that, had the Portuguese been able to carry off the plunder, they would all have been enriched. With the growing importance of Surat, Rander declined in prosperity, and by the close of the sixteenth century (1590) it is spoken of as a port dependent on Surat. Still, at the beginning of the seventeenth century (1610) it was a pleasant town with good houses : Though in 1666 the town is said to have been falling into ruins, the Dutch still kept up a depot at Rānder. In 1774 Rander is spoken of as a town of pretty large size, and it has since continued to be a place of some trade. The Nayakas have long ceased to have any importance at Rander. Their

place as traders has been taken by Bohoras of the Sunni sect. These men carry on trade westwards with the Mauritius, and eastwards with Rangoon, Moolmein, Siam and Singapore, visiting these places and sometimes settling there for as long as ten or fifteen years. All of them able to read and write, they maintain in Rānder four schools, where Arabic and Urdu are taught. The Rānder mosque has special interest as bearing marked traces of its former owners, the Jains. Such of the images and more ornamental stones as were not broken to pieces, serve as steps in the doorway of the mosque, or have been turned to more dishonourable uses. But the pillars in the mosque and the cistern in the court-yard are both of Jain workmanship, and the hollow places in the walls, intended for images, have been allowed to remain unaltered.

Civic affairs

According to the census of 1951, the agricultural population in the city numbered 1,274 persons ; and the non-agricultural 12,938 persons, of whom 2,543 persons derived their principal means of livelihood from production other than cultivation, 2,406 persons from commerce, 726 persons from transport ; and 7,263 persons from other service and miscellaneous sources.

The civic affairs of Rānder are governed by a municipality working under the Bombay District Municipal Act (III) 1901. The Municipal council is composed of 19 members elected by six wards. Fifteen are general seats ; two seats are reserved for the scheduled castes in wards Nos.I and III. and two seats are reserved for women, one to rotate in wards Nos. I, III and II and the other to rotate in wards Nos. V. IV, and VI. In 1954-55, the income of the municipality (excluding extraordinary and debt heads) was Rs. 1,59,727, composed of municipal rates and taxes, Rs. 1,24,571; revenue derived from municipal property and power apart from taxation, Rs. 11,936 ; grants and contributions, Rs. 22,395 ; and miscellaneous, Rs. 825. The expenditure of the municipality in the same year (excluding extraordinary and debt heads) was Rs. 1,42,183, comprising general administration and collection charges, Rs. 25,663 ; public safety Rs. 15,027 ; public health and convenience, Rs. 62,388 ; public works Rs. 4,366 ; public instruction Rs. 26,487 ; and miscellaneous Rs. 8,252. The number of houses in 1954 was 2,993, and their capital value was assessed at Rs. 1,42,42,858. There is a joint water works with the Surat Borough Municipality and water of it is received from Nānā Varāchhā situated at a distance of six miles from Rānder. Compulsory primary education is administered by the Surat District School Board, the Municipality making its statutory contribution. There is a motor trailer fire pump, and the fire-fighting staff consists of four persons. There is no proper drainage arrangement in the town. The removal of night soil is done on a contract basis. There are seven miles of road in the town, 5.75 miles of which are mettalled. There is a municipal dispensary.

SACHIN

Sachīn (Chorāsī T.; 21° 5′ N, 72° 59′ E ; P. 1,146,) a small village, was the headquarters of the Nawāb of Sachīn until the

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State of Sachīn was merged in the Surat district in 1949. It contains the Nawāb's palace and garden and a dispensary. A high school was started in June 1954. in a rented building (the Nawāb's palace).

SONGADH

Songaḍh (21° 40' N, 71° 50' E ; p. 2,858), the headquarters of the Songaḍ taluka, is a station on the Tāpī Valley Railway. It was once a very flourishing town. Historical Songaḍh is now in ruins having been burnt almost to the ground eighty years ago. Some houses have been built at adistance of half a mile, forming a settlement, which is called New Songaḍh. The fort is situated to the west of the town on a small hill, the top of which is reached by a foot path about a mile in length from the level of the plain below. The fort was originally seized from the Bhīls. From the top of the hill two high walls descend to be connected at the bottom by a very high wall in which is a gateway. The only portion of the defences which is still kept in repair is the entrance at the north end. Within the fort there is a very deep artificial quardilateral pond measuring about 25 by 30 feet. Besides this there are small tanks which hold water throughout the year. In the lower part of the enclosed space are the ruins of what must have been a fine palace with several storeys. Some few rusty cannons, and two or three pujāris, are all that is now left to recall the ancient strength of the fort. Amongst the ruins there are large cisterns hewn out of the rocks which still look as if they had been filled with ghee (clarified butter). The popular idea is that the still existing remnants will heal wounds. The fort was probably built, or at any rate restored, in the time of the Moghul Emperors. A few temples in a dilapidated state are of some architectural interest. All public buildings are in the new Songadh. The climate of the station is notoriously bad. There is a Government dispensary in the town.

There is *Dharmashālā* bearing the name of Aṁbābai Sāhebā, the wife of Khanderao Mahārājā of Baroda, with an ancient well which once supplied water to the whole town.

SUNWĀLI.

Suṅwālī (Chorāsī T. ; 21° 10' N, 72° 49' E ; p. 2,512), at one time was a place of anchorage for vessels visiting Surat port. It lies 12 miles west of the Surat town outside the mouth of the Tāpī The channel about one and a half miles in breadth and seven miles in length lies between a long strip of land, dry at low water, and the shore. 'Sunwālī hole' is a cove which cuts into the lands about the middle of this channel. With the arrival of large European ships, which had often to remain in the Tāpī, for several months, Suṅwālī became the seaport of Surat. By the end of 18th century, however, Suṅwālī was no longer a place of anchorage.

SURAT

Surat, north latitude 21° 12', and east longitude 72° 52', situated on the southern bank of the river Tāpī, is by water about fourteen, and by land about ten miles distant from the sea.

Locational Features and Surroundings

Surat lies at a bend of the river, where its course swerves suddenly from south-east to south-west. With the castle as its centre, the city forms an arc of a circle, the lands enclosed by its walls stretching for about a mile and a quarter along the river bank. From the castle, looking south, the public park forms the foreground ; its trees, with the exception of a row of buildings that stretch along the bank of the river, hiding the parts of the city that lie beyond. To the west, the river, washing the castle walls as it passes, winds though low meadow lands, green, though somewhat bare of trees. From the right bank of the river the ground rises slightly towards the north, where, on a high bank overlooking the stream, may be seen trees and some of the buildings of the ancient town of Rānder. Crossing from Rānder, behind a narrow strip of cultivated land, groves of rich trees stretch westward to within a mile of the castle.

Standing out among the trees the building known as the Rafiburaj, or Rafi's tower marks the northern extremity of the outer wall. Between the Rafi tower and the castle a row of large houses fringes the river bank and behind them, on the lowlying land to the east and south-east stretches the city from the castle as a centre, in 1664 and in 1717, two lines of fortification were drawn, the inner including 440, and the outer 1,818 acres. Though the inner wall has for many years been almost entirely removed, the hollow or natural moat that surrounded it served to maintain till recently a line of demarcation, between the city and suburbs of Surat. But portions of this moat have been recently covered up with the result that the old demarcation has disappeared at places. Most of the city wards are thickly peopled ; the narrow streets winding between rows of large well-built houses, the dwellings of the richer class of Hindus, Parsis and Mohammedans. The suburbs too, which once were gardens and in the last century were cultivated as fields only, are now thickly populated or covered with small scale factories. The unmettaled lanes., hollowed several feet below the general level which were water courses in the rainy season are paved with blocks of stone. Out side of the walls, to the north and the east, the land is rich, well watered, and covered with trees. Most of the industrial expansion of the city beyond the walls has taken place in these two directions. To the south the soil is poor, and except for some private gardens the country is bare. Westwards, along the bank of the river, the police lines which were of old the military cantonment, the tree-sheltered dwellings on either side of the Dumas Road, and the open parade ground stretching to the river with the cluster of colleges that have sprung up across the road in the course of the last forty years, give this part of the outskirts a very cheerful appearance.

Climate and rainfall.

The climate of Surat can be divided as follows :—

(1) summer season for three months *i. e.* March to May, (2) rainy season for four months *i. e.* June to September,

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(3) autumn seasons for two months *i.e.* October and November,
(4) winter seasons for three months *i.e.* December to February.

During summer it is generally very hot and the temperature varies from 100° F to 112° F. In monsoons the climate is pleasant and equable. The months of autumn are temperate. The winter is not very cold, but in January the temperature runs between 50° and 60°F. The average annual rainfall is 45".

Importance as a trading centre, place o culture and education etc.

Three centuries ago Surat was one of the biggest cities of Gujarāt and the chief port of the Moghul Empire. It was the emporium of trade, inland and seaborne, and had its own mint whose location can still be pointed out as the market opposit the Police Furja in Chowk Bazar. This mint existed till 1815 A. D. as stated in his book by Sir D. R. Wāchchā. Every year during the season of exports its streets offered a pageant of races in their varied attire and its harbour fluttered the flags of nations carrying on maritime trade. The seasonal turnover was reckoned by the crore and covered among the merchandise finished products made in Surat by its skilled artisans and craftsmen. These included varieties of textiles for ceremonial and utility wear and pieces of exquisite workmanship in wood, laquer, ivory, mina and jewelry. But with the development of Bombay as the chief part of the Western Coast of India, the trade, wealth and importance of Surat declined a great deal.

After about two centuries, however, Surat is looking up. Situated on the river in favourable vicinity of the sea and halfway on the Western Railway run from Bombay to Ahmedābād and connected with Khāndesh by the Tāpī Valley section of the railway it may well aspire to be as prosperous and flourishing as in the past. With its small scale factories it is already cutting a figure in all India as an important centre producing jari and art silk fabrics. At present there are 2,000 units working in the jari industry. They produce goods worth of Rs. 10 crores per year and provide 40,000 persons with employment. Jari goods are exported mostly to South India, Africa and the Middle East. In the field of art silk and cotton fabrics are run about 15,000 looms with 2,000 handlooms among them employing in all 50,000 persons and turning out goods worth Rs. 15 crores. There are also other industries like brass-ware making their own way and waiting to be helped to a flourishing condition. The twelve banks some of them with branches in different localities are an index of the industrial and commercial activity of the city. Three of these are worked on co-operative basis, the People's Bank and Surat Banking Corporation being confined to Surat and the District Bank covering the district.

Winchester Museum.

The city has a museum called Winchester Museum of which the foundation stone was laid on 1st February, 1890 at the western end of the present Gāndhī Baug, by Mr. G. B. Reed, the then

Collector of Surat. The museum was given this name in appreciation of the interest taken in the prosperity of Surat by Mr. Winchester, the Assistant Collector of the time. It was started with the humble aim of housing in a small pavilion type structure a collection of only maps and models so as to help the process of education more directly than costly curious. Later, however specimens of local arts and crafts also came to be added for the benefit of grown-ups of the city and of outsiders paying a visit to Surat. The year 1952 saw the centenary celebrations of the Surat Borough Municipality and as a popular item of it a grand exhibition was organised which furnished ideas for enlarging the museum. The collection was moved to the present premises, the weaving shed of old, to which was added in 1956 an up-to-date functional wing at the cost of a lakh of rupees. The number of articles collected by 1952 was 1,300. It has now gone up to 9,000 of which as many as 6,000 articles are received gratis from the public. The initial floor area of 1,200 sq. feet has been extended to 6,800 sq. feet. All this progress was made in five years since 1952 during which the Municipality has made a total grant of Rs. 88,500. In quality, too, the collection has drawn praises from persons who know.

The Ranga Upawana (Open air theatre).

The western part of Gāndhī Bāug was never quite popular but since the construction on it in 1954 of the Ranga Upavana or the open air theatre, it has drawn to itself crowds of people on many an occasion. The theatre comprises of a stage 60'x35' with two green rooms and an open to sky auditorium with a capacity for 4,000 seats.

Education

There are 64 primary schools in the city. In the year 1955-56 the total number of students in all the primary schools was 31,720. Of these 19,114 were boys and 12,606 were girls. There are 16 schools giving secondary education with a total of 9,222 students on roll in the year 1956-57. Besides these, the F. S. Pārekh Technical School with 199 students on roll in 1955-56 offers diploma courses on the technical side.

The institutions providing for higher education are listed below:

Name of the Institution		*No. of students*
(1) The M.T.B. College of Arts and Science ...		1,498
(2) Sārvajanik Law College		138
(3) K. P. College of Commerce		748
(4) Ochhavlāl Nāzar Ayurvedic College		240
(5) Vidyā-Mandir Women's College		78
(6) Vanitā Vishrām Ladies Training College ...		168
(7) Dr. Sorābjī Gāndhī and Dr. Sarosh Gāndhī College of Engineering and Technology ...		
Diploma Course	127	145
Certificate Course	18	

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The C. M. Gāndhī Vidyābhavan, an institution for post-graduate studies, bids fair to be an important research centre in southern Gujarāt.

Castle.

The chief historical feature in Surat is its castle planned and built at the instance of Sultān Mahmud III of Gujarāt by Khwājā Safar Salmani, an Albanian Christian who had embraced Islām and was later awarded the tiltle of Khudāwand Khān at the court of Gujarāt. The date of completion of the citadel is recorded as Hijri 947 (A.D. 1540-41.) After the capture of Surat by Emperor Akbar (1573), the fortress remained in charge of commandants appointed from Delhi till, in 1751, it was scized by the Sidi admiral of the Moghal fleet. The Sidi did not hold the castle, for long for in 1759, with the rest of the city, it was captured by the English. Though from the first practically independant the English held the castle nominally under the Moghul. In token of this divided command, two flags waved from the castle walls, the English ensign on the south-west and the Moorish standard on the south-east bastion. This practice was continued till, in 1842, on the death of the last of the nawabs of Surat, the Engish fleet was removed from the Tapti, and the Moorish standard taken down from the castle walls. As far as has been ascertained, the only change since the castle was built by Khudāwand Khān was made in 1760, when on the eastern side, opposite the entrance, the English added a work and gateway on the outer bank of the moat[1]. In 1774 the castle is described as an irregular square, the shortest side, and one of the oblique sides facing the west and north-west, washed by the river. At each corner is a large round tower, about forty feet in height, the walls and curtains between rising nearly as high as the towers[2]. Though, as a defence against any well-equipped enemy, they have long been useless, the castle buildings have always been kept in repair, and until the year 1862, were garrisoned by a small body of European and native troops. In that year, as no longer required the force was withdrawn, and the vacated rooms were made over for the accommodation of various offices connected with the revenue and police departments. The moat on the eastern side has been covered up and a breach in the outer wall is made to face and lead to the old main entrance.

The City

Of the appearance, condition and population of the different quarters of Surat city and suburbs and of the present state of the city walls, the following information is available[3]. To-day the suburbs are no mere extensions of city limits as they were till the beginning of the present century. They are as much part of the

1. This gate bears the inscription : "Built, April 1760. Under orders of William Andrew Price, Esq., Chief for affairs to the British nations, and Governor of this castle and fleet. By Lewi Felix de Glass."

2. Stavorinus, II., 473.

3. Besides information collected personally, these details have been compiled from records of tour surveys of Surat : (i) The report of the committee appointed to report on the state of the city walls, 1800 ; (ii) A city survey of Surat, 1817 ; (iii) A city survey of Surat, 1876 ; (iv) A contour survey of Surat, 1869.

IDOL OF AMBAJI



PORT OF SURAT WITH THE FORT IN BACKGROUND



city as any of the inner and older quarters. Still for a clear presentation of the information, the old distinction is maintained in the lines that follow. The city as distinguished from the suburbs has the area enclosed by the line of the inner walls, and contains fourteen divisions called Chaklās or wards. Starting at the castle and working from the north eastwards, the divisions come in the following order :

Chowk Bazar

I. *Chowk Bazar Chakalo*, or the square market ward of old days includes about four acres of low-lying land. This quarter contains the castle and the Civil Hospital[1] with the fountain erected to commemorate the inauguration of the Tāpī Valley Railway, the Gāndhī Baug with the statue of Mahātmā Gāndhī at the entrance and facing the fountain, Nemchand Melāpchand Institute for nurses. P. J. Tāleyārkhān Scout Hut, the State Bank, the old Government High School of later converted into Sorābjī J. J. Primary Teachers' Training College, and behind it the museum known as Sardār Vallabhbhāi Saṅgrahasthān. then again near the river the Nagīnchand institute housing Andrews Library on the ground floor and providing a public hall on the upper storey, the English church now abandoned. the old custom-house which is used at present as the chief police station of the whole city which overlooks the site of the old ṭankshāl or mint converted into a market, and again towards the river the District Local Board Offices built on the site of the Daria Mahal or sea palace which in old days was the residence of the Bakśīs. With so many public places this ward has hours of congested traffic, the more so because it is also connected by the Hope Bridge with Rānder and other places over the river. Besides many routes of the state transport buses converge at the head of the bridge. The houses in this ward are for the most part dwellings of well-to-do citizens. They are generally two storeys high, with brick walls and tiled roofs. Its shops are also good as advantage was taken of the fire of 1872 to have them rebuilt with a certain uniformity of size and style. This ward is inhabited by Mohammedans,[2] Hindus and Jains.

Mulla Chaklo

II. *Mullā Chaklo*, the Mulla's ward, includes about 67 acres of comparatively high land, lying along the bank of the river to the north of the Chowk Bazar. The name of this quarter is said to have come from Mullā Mohammedalī of Bhatar, a great ship-owner and merchant. In this ward was situated near the river a building called, Dariā Mahāl or sea house. Built by one of the nawābs of Surat as a hot weather retreat, this palace was afterwards used as the high school. Close by one the House

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1. The civil hospital stands on ground once occupied by the nawab's arsenal.

2. Chiefly converted Mussalmans or Memans, known by the name of Sindhis, and the quarter inhabited by this class is called "Sindhiwad".

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and School of the Irish Presbyterian Mission[1] occupying two of the fine old Mussalman dwellings of this area. Beyond this on the bank of the river is the old English factory.[2] It has since been used, first as a hospital, then as a lunatic asylum, and is now a private dwelling. As it stands at present the building can only be a portion of the original 'lodge', which was built of stone, and contained accommodation for forty persons. It seems probable that the factory originally extended as far as the Moghal Serāi road. In parts of this ward further from the river are a few old mosques, mostly in ruins. Of these the most interesting are the mosque and the tomb known by the name of Marjan Shami. The former bears over the entrance an inscription dated H. 736 (A.D. 1335) but was very likely built at a later date, though not perhaps so late as the time of Marjan Shami(1560A.D.), on the site of the earlier Jain temple of Chintāmaṇī Pārśwanāth, which is believed to have suffered sack from Mohamedan fanaticism. Much of the beautifully carved wood of the temple was pushed into service in the building of the mosque and was to be seen there as recorded by poet Narmad. The other is the tomb holding the remains of Khudāwandkhān, who built the castle and died at Div in 1546 A.D., Mirza Sāmi is built in the Indo-Saracenic style developed in the capitals of Gujarāt. The maysoleum is a protected monument.

Municipal Hall

But of Mussalman remains, the chief is that now used as a municipal hall. The structure was originally intended to be a resting place for Mussalman travellers and was built in the year 1644 by Hakikat Khan[3] the then commandant of the castle. This building was repaired in 1868 by the Municipality at a cost of Rs. 33,080. The hall was fitted up for municipal meetings and some of the out-houses were set apart for the use of travellers, but the whole is now exclusively used by the Municipality.

Near the municipal hall were the remains of the old racket-court. It was constructed jointly by the nawāb and Phirojshāh Dhanjīshāh Behremanakhān for the benefit of the Europeans of Surat, but no trace of it now remains though among the old people there are a few who remember it as the Dādimār. Close to the Dādimār plot stood a wooden cross of the old chapel of the

1. It would seem to have been the mission house that Sir Nicholas Waite hired on behalf of the "New or English Company", when he came to Surat in 1700. The tradition of its being once the residence of an English governor still clings to it. The position also suits well as Sir Nicholas Waite's house was near enough to the old factory to be clearly seen from it", the sight of their rivals at liberty adding to the bitterness of the old factors confinement". During the seventeenth century, the Dutch would seem to have held another of these houses, as in 1664 the Dutch and English are together said to have served one of the quarters of the city from plunder.

2. It seems doubtful whether, during the seventeenth century, the English company did not change their factory. The factors were allowed to build in 1618, and that which they defended with so much success against Shivaji in 1664 would seem to have been a different building from the great house they lived in about the close of the seventeenth century. A least in 1690 Aurangzeb is spoken of as their landlord.—Ovington, 388.

3. Abdul Hakim's History.

Capuchin Friars who for more than a century (1660-1770) held an honourable place in Surat. In 1664 father Ambrose, the head of the convent, went before Shivaji, and prayed for he Christians being Spared. The convent was unassailed,[1] I and all who took refuge in it escaped without injury. Ambrose held so high a position in Surat that he was invested (1666) with power to decide questison among Christians, and punish[2] them as he pleased. In 1666 he is said to have pacified the governor of the city who was enraged against the French on account of the piracy of Lambert, French captain.[3] The English also profited by his exertions, and many years after (1700, April 17th) his services were acknowledged with gratitude by the President in council. In 1695 the Italian traveller, Esemeli Careri noticed their house "decently adorned and conveniently built in the manner of Europe".[4] Hamilton (1700-1720) also praises them;[5] and in 1764 Neibuhr notices that after power and wealth had abandoned the French at Surat, the nation was still held in estimation on account of certain Capuchin Friars, who were generally esteemed and respected in Surat. Besides their services as healers of sickness among men of all religions, these Friars did good service to the public by keeping a register of all events that had happened in Hindustan from 1676 to 1764.[6] A metal tablet fastened to the cross bore the inscription :

Hic exstabat
Unicumalater
Veteris Eccleside
Capuecinorum
Et Contemporte

Unfortunately nothing remains of the chapel or even of the cross. Further to the north was the Portuguese factory. a portion of which bears an inscription to that effect and is now the property of a Hindu merchant. The rest of the factory has long fallen into ruins. Behind the Portuguese factory was the French Lodge[7] but all traces of the buildings have disappeared. To the north-east of this site was the Armenian church abondoned as a place of worship towards the end of the first half of the nine-

1. Thevenot, V, 87,
2. Thevenot, V, 91-93.
3. Thevenot, V, 63.
4. Churchil, IV, 183.
5. Hamilton's New Act, I, 163.
6. Pinkerton, X, 215.
7. A Persian factory, at one time, stood next to the French factory. In 1670 the French are said to have saved themselves from plunder at Shivaji's hands by allowing some of his troops to pass through their buildings, and rob the Persian factory Bruce's Annals, II. 285.

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teenth century.[1] At present only the site of the alter can be noticed, the open ground being in possession of a Pārsī gentleman. Of the fine old Musalman houses which as late as 1817, adorned this quarter of the city, hardly any are to be seen now. The busy contractors, or Kaṭpītīas who, about the middle of the last century, carried on a roaring trade buying up materials of old mansions and selling them piecemeal have left little trace of the old grandeur. On the other hand, especially near the river, Pārsīs and Hindus raised at a later stage large and well built houses. In the seventeenth and eighteenth centuries the foreign merchants, both Europeans and Asians, who resorted to Surat, lived for the most part in this quarter of the city. As late as 1817 many of the houses were occupied by Armenians. Arabs, Persians, and Jews. At present the inhabitants are chiefly Hindus, the old Parsi residents having migrated to Bombay in large numbers.

Māchhlipīṭh.

III. *Māchhlīpīṭh Chaklo*, or the fish-market ward, south of the Mullā ward, includes about thirty acres of slightly raised land. The market which gave its name to this part of the city continued to be held till, in 1869, it was transferred to the new municipal buildings. It was here that the great fire of 1837 broke out, burning down almost the whole quarter. The people now dwellling in this part of the city are chiefly Hindus, but till the early decades of the present century, this quarter included one of the chief Pārsī localities in Surat. Though a very large majority of the Pārsī of this quarter have migrated, a part of it viz. the one to the north-west of it is today the site of several charitable Pārsī institutions such as Sir Jamshetjee Jejeebhoy Pārsī Boys' School, the Parsi orphanage, the Pārsī General Hospital and Narimān Infirmary.

Rāṇītalāo

IV *Rāṇītalāo Chaklo*, or the ward of the queen's pool east of the fish-market ward, includes about twenty eight acres of slightly raised land. The name is said to have come from a reservoir built by the wife of Gopī, the patron of Surat and chief minister of the Sultanate of Gujarāt during the last years of Mahmud II and the early years of his successor. This part of the city suffered heavily during the fire of 1837 and the houses built since have for the most part a mean apperance. The population consists of

1. In 1843, when the English government ceased to aid the Armenian church by grants of public money, the church in Surat was closed, and has not again been opened. It now forms part of a Parsi dwelling; but the owner of the house would seem to have respected the church, altering nothing since it was left by its priests. The armenians do not seem to have risen to a position of importance in Surat much before the end of the seventeenth century. But from that time till near the close of the eighteenth century their name occurs in almost all notices of Surat trade. This chapel was finished in 1777. The priests were paid by the contributions of their congregation. But before the close of the eighteenth century the number of Armenians had greatly fallen off. In 1811 there were about fifty families, and in 1825 only five remained. On the recommendation of Mr. Romer, then judge of Surat, the Government of Bombay in 1825 granted a yearly sum of £72 for the mintenance of the priests. (Government letter dated November 4th 1825). According to the census of 1872 there were in that year only three Arme-nians in Surat.

Hindus and Mohammedans, many of latter in poor circumstances.

Kanpith.

V *Kanpith Chaklo,* or the grain-market ward, south west of the queen's pool ward, includes about eleven acres of comparatively elevated land. It is not now the only place in the city where grain is sold. This quarter was among those that suffered most heavily in 1837. At the same time, the new houses are with a few exceptions, good, two or three storeys high. The people are well-to-do, chiefly high caste Hindus, Baniās, and Brahmins. The main road of the city leading from Chok Bazar to the station runs through this quarter and is flanked on either side here by many of the city's best-run shops and also by a number of banks.

Kelāpīth.

VI *Kelāpīth Chaklo* or the plantain-market ward, south of the grain-market division, includes about twenty-three acres of comparatively high land. This part also sufferred severely from the great fire of 1837, but most of the houses raised later are well-built. This is especially the case with the Nāṇāvaṭ, or bankers' quarter, which earned the name with its thriving banking activity in the hey-day of Surat. A few bankers still carry on business in the indigenous manner. But the quarter's chief attraction is the market offering to supply greens, grains, grocery and women's fancy goods. In fact it is the one market which women would call their own. The Hindu temple of Vithalwadi managed on modern lines with several cultural activities would also share the credit of drawing crowds to the quarter. The people are for the most part Hindus of the trading class.

Bālājī.

VII *Bālājī Chaklo* or the ward of Bālājī the principal deity of the temple built by Srī Kṛṣṇa Arjun Travāḍī sometime in the first two decades following the transfer of Surat to the East India Company in 1800. In the last centuries the ward was better known as Rabhā as soni's Chaklo, after Rabhā, a goldsmith who was believed have known the secret of transmiting copper into gold. This ward was in the first quarter of the last century, the head quarters of the Mārvārī money lenders known as Kiyativās who gave small loans at exorbitant rates and recovered them heartlessly. Their great houses were all gutted in the great fire of 1837, whence they migrated to Bombay. This part also had the worst of the fire. A portion of this quarter is called Chhīpwād or the street of the Chhīpās *i. e.* calenders, but these artisans inhabiting it have long lost the craft. The area from the Chhīpwāḍ to the Bālājī temple is a veritable stronghold of Hindu culture. It also witnessed throngs that gathered round great political leaders like to Lokamānya Tilak and Aravīnd Ghose in the early part of this century. The biggest secondary school for girls is located in this area. Another part of the quarter associated with Ātmārām Bhuk of old, is now the site of the Hindu Dharmādā Hospital, the Hindu Library and such other charitable institutions for Hindus. The popula-

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tion of the whole quarter is entirely Hindu and the buildings are large and handsome.

VIII *Bhāgātalāo Chaklo*, or the garden pool ward, south-east of the plantain market, includes about 37 acres of low-lying land. The pool from which this quarter has got its name was a large and very old well, in use, they say, when the site of Surat was still garden land. In the north-east part of this quarter is situated Morārbhai Vijbhukhandās Hospital for Women and Children. The south-west part is marked by the grave yard of the Roman Catholics. Their church opposite the grave yard has for some decades been the Ārya Samāj Hall of the city. This hall the chief venue of important public meetings of political and cultural character, particularly in the second decade of the present century. Adjoining the hall and also across the street are the different sections of the Pārekh Technical School. The main road from the castle to the station stretches across this quarter and to the north runs into the Kaṇpīṭh. The houses in this quarter are large and handsomely built. The inhabitants are Muhammadans and Hindus.

Gopipurā.

IX *Gopipurā Chaklo*, or Gopī's division, south of the plantain market, includes about 30 acres of elevated land. Portions of this division, called after Gopī the patron of Surat, suffered from the great fire. With Hindus this quarter was till lately the most fashionable and enlightened of the city. It has many large mansions richly ornamented with wood carving. Its chief features are Agama Mandīr and many other Jain temples and Jain monasteries, its primary and secondary schools and its spacious *Dharmashālā*. Till about the end of the first world war the Jain locality of this quarter was a thriving pearl market and the names of some of her sons were known in the pearl markets of Europe. In fact many of the Jain firms had settlements in Paris and London. But today the wealth is all lost and the splendour has faded. Another feature of this quarter is its numerous schools. Except on its out skirts, where a few poor Mohammedans live, the population consists almost entirely of Hindus Communities like Brahmins, *kayasthas*, *banias* and Jains.

Wāḍifaḷiā.

X *Wāḍīfaḷiā Chaklo*, or the garden street ward, east of Gopī's ward, includes about 22 acres of raised ground. This ward is said to take its name from one of the gardens on whose site Surat city was built. In 1837 the whole of Wāḍīfaḷīā was burnt down. The residents are mostly Hindus, most of them well to-do and not a few quite rich.

Khāpaṭiā.

XI *Khāpaṭiā Chaklo*, west of the garden street ward, includes about 25 acres of raised ground. This quarter was entirely burnt down in 1837. The residents are almost all Hindus. Khāpaṭiā Chaklo proper is the central part of the quarter where two roads cross. At that spot men and women of the labouring

classes collect from eight to nine in the morning waiting to be hired. These labourers would seem to have gained a good name for industry, as the phrase, 'a labourer of the Khāpaṭiā Chaklo' is commonly used to mean a zealous workman. But the concentrated labour market of old days is now scattered over various quarters of the city. Besides, the labourers have lost much of their old credit for zeal.

Sanghāḍiāwāḍ.

XII *Sanghāḍiāwāḍ Chaklo*, south of Gopi's ward, includes about 52 acres of uneven ground. Part of this division was burnt in 1837. Pārsīs would seem to have settled in a part of this quarter in 1817. But most of them have lately migrated and hardly a few families now remain. Another section of the ward was inhabited by Dawoodi Bohras who are followers of the Mullājī Sāheb. The Bohras of this locality are said to have been the first of their class to settle in Surat. Those who came after them were not allowed to build within the city walls, and an unfavourable site was assigned to them to the east of the city. Many of the Bohra's houses in Sanghāḍiāwāḍ and in the neighbouring Gopīpurā ward were very large and a few had as many as seven storeys. But the Sanghāḍiāwāḍ settlement of the Bohras is long deserted and even Gopīpurā can claim not more than a couple of homes. The zampā bazaar area is now the only part of the city where the Bohrās are found, though of course the very rich among them have their summer resorts on the river side and such other open spaces. Both Pārsīs and Bohrās have their places of worship in this quarter. Of the present population, though some are Brahmins and other Hindus, the chief part are weavers, calendrers and other artisans. Among these the weavers like those of other quarters of the city have, during the last two decades, pushed themselves rapidly forward to prosperity by dint of their hard work.

Bade Khān. chaklo

XIII *Baḍe Khān Chaklo*, or Baḍe Khān's ward, west of Gopī's ward includes about 38 acres of low-lying land. In the centre of this division, behind the Desaipol street, is the 'Walandā Koṭhī', or Dutch lodge or factory, for long the best built and healthiest house in Surat. But no trace of the former splendour is now to be noticed today.[1] Though this division was not visited by the fire of 1837, this quarter is one of the few in the city that is sparsely inhabited. There are empty spaces that would seem to be sites of ancient houses. Of the Mussalman dwellings and places of worship that, in 1817, are mentioned as ornamen-

1. There is some doubt about this building. Like the English, the Dutch would seem, during the seventeenth century, to have had their factory in the Mulla-chakla quarter (see above pape 9). If this was the case the 'Walanda Kothi' must be "the house of Hibar Khan", given to the Dutch under the provisions of the charter of 1712, on condition that no angles nor embrazures should be made in it, nor any great or small guns conveyed into it. (Stavorinus, III., 74). In 1762 the nawab, apparently at the instigation of the English, subjected the Dutch to a long siege in this building. The contest ended in the defeat of the Dutch, who were forced to take all their effects to their wharf on the river bank near the Mecca creek. The building in the city was not then taken away from the Dutch. But in 1774 it was already in an extremely ruinous condition used only for 'bazaaring', or examining piece-goods-Stavorinus.

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ting this quarter, the Kaji Masjid, the principal in mosque in Surat, is the only one that remains. The inhabitants are chiefly Mussalmans, artisans and labourers.

A'surbeg-Chaklo

XIV *A'surbeg Chaklo.* or Asurbeg's ward, west of the Baḍe Khān Chaklo ward, includes about 41 acres of low-lying land. The space behind the civil hospital, now occupied by timber-yards. was formerly the site of the nawab's place, and is still commonly known as Juna Durbar, or old court. In the southern extension of the public gardens which forms part of this ward, the Ranga Upawan or open air theatre is lately constructed with accommodation for 4,000 persons. Abutting upon the extension to the south–east was an old Jain temple all in ruins. It has now been rebuilt and with its surrounding open space it has become an evening rendezvous of Jains. In 1817 this division was chiefly inhabited by Mussalmans. At present there are, besides Mussalmans, Machhīs, and Harijans. The new comers who formerly lived in the Nānpurā suburb, between the commodore's house and the Dutch wharf, were brought here in 1860.

The Inner Wall.—Though its masonry work has been almost entirely removed, the line of the inner wall does, in many patrs, still divide Surat into the city and the suburban areas of old. The wall was begun in consequence of the success of Siwājī's attack in 1664; but does not seem to have been finished for several years[1]. The fortifications, when completed, were styled Sheherpanah, or the shelter of the city. In 1817 this wall is described as varying from 20 to 28 feet in height, and from 8.5 to 12 feet in breadth. There were twelve gates, to the north the Variāvī, to the east the Syedpurī and Burhānpurī: to the south the Navasārī and Majurā; to the west the Mecca and Badashāhī; and along the river front the Dacca, the Rājā Owārā, or custom-house water gate, the Mir Beher known also as the Gujari Owārā because of its vicinity in old days to the main market; and the Mullā Khadakī, or Latī gate.[2] In 1817 the northen face of the wall was in good repair. The Variāvī gate-way, over 28 feet high, was flanked by two towers, each rising to the height of 26.5 feet. On the east face the wall was 'in many places decayed beyond repair.' The Sayedpurī gate was in ruins; but the Burhānpurī gateway was still standing 29 feet and two inches in height, and flanked by two towers, each of them 22.5 feet high. To the south the Navasārī gate was flanked with two towers. but the whole was 'much decayed'. The Majurā gate and the tower were also in a ruinous state. The tower and wall of the Mecca gate, at the south-west, were in a decayed state, and to the west, at the junction of the river and the Mecca creek, the Badshahi gate and towers were also in ruins. Along the river front, south of the castle, was the Dacca gate, like the rest of this part of the river wall, in a bad condition. No remarks are made about the

1. When Fayer wrote, (1672-1681) the walls were still building. 'High' he adds, 'and of good well-baked brick'. Fryer's New Act, 98.

2. It was through this gate that, under the terms of the charter of 1716, the English were, on payment of a yearly sum of £ 10,000 allowed to pass their goods free of duty.

wall as far as the Mīr Beher gate, where there was a tower in good repair. Finally the wall near the Mullā Khadkī, or Lati gate had fallen down in many places. Since 1817 the remains of the inner wall have from time to time been used in making and repairing roads. In 1876, along the northern face to near the site of the inner Variāvi gate, the wall remained but little decayed. Beyond that to near Sayedpurī gate, its base showed a few feet above the level of the ground; but throughout the rest of the circuit, as far as the site of the former Badshahi gate, nothing but the foundation only was visible . Further on to the castle, the wall remained and the top had already been converted into the promenade which to this day contributes space and grace to the public gardens. The Dacca gate had been removed. Between the Rājā Owārā and Mire Beher gates 375 feet of masonry were washed away in 1837[2]. Already along the line of the wall dwelling houses had been built, so that the foundations were the only parts remaining visible. Near the Dacca gate was a wooden platform for loading and unloading vessels to which is added very recently, a more spacious one in reinforced concrete. The Rājā Owārā, or custom house water-gate, the Mire Beher, the Mullā Khadkī, or Latī gate remain to this day. In front of these are flights of stone steps reaching to low water mark. Outside of the inner wall runs a hollow or natural moat, known as the Macca Creek. This hollow, joining the river at the southern corner of the public gardens where the old Badśāhī gate once stood, passes along the line of the wall, the level of its bed gradually rising until the site of the former Syedpurī gate is reached. From this points of the slope of the hollow falls in the opposite direction, that is, towards the Variavi gate, and a branch runs down and joins the river at the northern extremity of the inner wall. Quite two-thirds of the area of the city is drained into this moat, or creek. Near the Burhānpurī Bhāgol, a length of the moat is laid with cement hume-pipes and covered up to make extra space available.

Suburban Gastipura.

Outside of the inner wall lie what formed the suburban areas of old, consisting of fifteen divisions, covering a total area of 1,818 acres. Beginning from the north, and working eastwards, the first division is Gastipurā. With the river Tāpī on its west it includes about one hundred acres of low-lying land subject to almost yearly inundation from the Tāpī. The division is said to come from Gheyās-ud-dīn, governor of Surat (1667). Once cultivated as gardens the greater part of this quarter now consists of fields and kilns for brick-making. The chief objects of interest are the Dutch, Armenian and Portuguese burying grounds on the east side of the Katārgām gate. No part of this quarter is laid out in lines of streets and houses. The dwellings are wantonly scattered a few huts in one place,

1. The flood of 1837 made a breach, thirty-five feet long, in this part of the wall.

2. Statement of the Faujdar of Surat, forwarded with letter dated 13th September 1837.

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and a small hamlet in another. There are, besides, several garden houses surrounded by wild-date, mango, and tamarind trees and belonging chiefly to Pārsīs and Hindus. With the exception of the owners of these solitary houses, the inhabitants are all poor people of the most backward classes.

Rāmpurā.

II Rāmpurā, east of Gastipurā and stretching as far as the outer wall, includes about 46 acres of comparatively high land. This suburb is said to have been founded by an Anāvil Brahmin. The southern part is thickly peopled predominantly by *Kuṇbīs,* weavers and cultivators by trade. With their jari gold-thread and other textile industry the inhabitants have made the quarter one of the wealthiest in present-day Surat. Their houses are substantially built and well proclaim the wealth they draw and shelter. This division is fringed beyond the outer wall by some most modern textile works. The quarter also boasts of a big secondary school. Besides in the extreme north is situated the Ashakbāśram Hospital known as the Gordhāndas Sonāwālā Hospital. The rest of the northern parts are inhabited by backward and scheduled class people who live in groups of untidy huts. At Kājīpurā a north easterly locality of this quarter the municipality has built a few tenements for harijans.

Raghunāthpurā.

III *Raghunāthpurā,* south of Rāmpurā, includes about 20 acres of comparatively high land. Like Rāmpurā this suburb is said to have been founded by an Anāvil Brahmin. Parts of it were once devoted to gardens. But today, like many other suburban areas of old in Surat this quarter has developed as one of textile industry. The houses are well-built. The population chiefly consists of Hindus. In the last century it included almost all the Deccani Brahmins that lived in Surat.

Medharpurā.

IV *Medharpurā,* south of Raghunāthpurā east of Haripurā, includes about 57 acres of comparatively high ground. This suburb is also said to have been founded by an Anāvil Brahmin. The houses are well built and are inhabited by Hindus, most of them quite well-to-do and not a few in affluent circumstances.

Haidarpurā.

V *Haidarpurā,* east of Medharpurā, and reaching to the outer wall, includes about 40 acres of slightly raised land. This suburb is said to have been founded by Haidar Kulī Khān, governor of Surat (1717-1719). The division is inhabited mostly by Hindus. Near the city wall are some rows of huts belonging to people of the lowest class.

Begampurā.

VI Begampurā, south of Haidarpurā, and abutting upon the outer wall from the Delhi gate to beyond the Sahara gate, includes about 2317 acres of comparatively raised land. This suburb was founded about the beginning of the eighteenth century by a sister of Emperor Auraṅgzeb, after whom it is called. A portion of the northern part of this suburb is occupied by the descendants of the late Mīr Jāfar Alī. South-west of

the Nawāb's palace is the Jāfar Alī Spinning Mill of old. Developed and modernised it now goes under the name of Surat Cotton Spinning and Weaving Mills. On the road connecting the Delhi gate and the Sara gate, there is also another modern mill viz. the Niranjan Mills. Some of the best Bohora houses are also situated in the division.

Sayedpurā.

VII *Sayedpurā,* south of Gāstipurā, and west of Raghunāthpurā, and extending westwards to the inner wall, includes about 56 acres of comparatively high ground. This suburb is said to have been founded by an ancestor of the Sayed Idrus family. Besides Hindus of all castes, Muhammadans and Pārsis inhabit the suburb. Backward and Scheduled class people also live in huts, of which quite a large number are near the line of the inner wall. The houses of Hindus are small but well-built. The Swāmīnārāyan temple and the historic Jain temple of Nandīśwar Dwīp Chandra Prabhu situated in Śrāvakśeri are the chief sights of this quarter. But the part of it whose historical value is widely known and esteemed is the Kotwāl's wadi where lived Ardeśar Kotwāl.

Haripurā.

VIII *Haripurā,* south of Syedpurā, and skirting the inner wall, includes about fifty-nine acres of lowlying land. The founder was, it is said, an Anāvil Brahmin. This suburb contains a curious mound, called *Runvālāno Ṭekro*, or the cotton merchant's mound. It is about twenty feet high, and is said to be artificial. Of its origin nothing has been traced. The Musalman inhabitants are in the north-west and in the west near the inner walls, backward and scheduled classes. The rest of the ward is inhabited by Hindus of all castes and Śrāvaks. Part of this suburb was destroyed by the fire of 1837, but today it is among the most thickly populated and wealthiest quarters of the city.

Navāpurā.

IX *Navāpurā,* west of Begampurā and stretching to the inner wall, includes abut 59 acres of low-lying land. The northern part of this suburb was inhabited by Mohemmedans chiefly those from Bundelkhaṇḍ. But today there are only a few houses of theirs. To the west near the inner wall live the poorer class of Hindus, and to the south Hindus of all economic strata, Śrāvaks, and Golās. It was in this suburb that the rice-market was held in old days. To the east is the Bohorā quarter called Jhāmpā, or the gate. Here is the palace of the Mullā Sāheb, the religious head of the Bohorās, as

1. This part of the town is said to have been called Jhampa, or opening, because in 1664, before orders were received to build the town walls, the governor of the city, for purposes of defence planted a milk-bush stockade. In this hedge only one opening, the Jhampa was left. If this is correct, the stockade was only put up for a time, as the original mud wall and hedge had three gates. See above, p. 89, Munshi Abdul Hakim's History.

also a large wooden mosque and two handsome mausoleums[1]. This particular quarter is separated from the rest of the suburb by a gate. But even outside this small locality magnificient houses of Bohorās are to be found, many of them being five storeys high.

Indarpurā.

X *Indarpurā,* south of Navāpurā, includes about 25 acres of low-lying ground. The founder was, it is said, an Anāvil Brahmin. The population consists of low caste Hindus. This suburb is thinly peopled, chiefly by weavers and Golās.

Salābatpurā.

XI *Salābatpurā,* south of Begampurā, and east of Haidarpurā includes about 175 acres of low-lying land. This suburb was founded by Salābat Khān, governor of Surat (1687). It is inhabited by Hindus, particularly Khatris and Golās. Towards the Māngate, Māchhīs and Harijans have their poor homes. The greater part of this quarter was garden land. Part of the suburb was consumed in the fire of 1837. But today this suburb is humming with textile industry.

Gopī-talāv.

XII *Gopī-talāv,* or Gopī pond, west of Salābatpurā and north of Rustampurā, includes about 58 acres of land, partly the bed and partly the banks of an old reservoir. The banks, strewn with tombs, are covered with bushes of suctard-apple and large baobab (Adansonia digitata) tree ; on the southern bank are Mohammedans burying grounds, containing, among other tombs, those of the Navā Syed Pirs the nine holy men, in whose honour a fair assembles every year, which is attended both by Mohammedans and backward Hindus. The bed of the tank, for many years dry, is now private property used as a garden for growing kitchen vegetables. This circular earthen hollow, without either water or stone fencings, is all that remains of what was one of the finest works in Gujarāt. Hardly any of the travellers who visited Surat in the seventeenth

1. The following description is extracted from Mr. Bellasis' pamphlet, p. 15 : "The mausolea, two in number, are situated in front of the great mosque, in a large quadrangular enclosure, in which are also a cistern constantly full of water and numerous sacrophagi covering the remains of the less distinguished relation and dependents of the Mullas. The more worthy, including several of their preceptors, are permitted to rest within the mausolea. These are large domed edifices, with gilded spires, rising to a height of more than thirty feet. The larger and newer of the two covers a more extensive area than is occupied by the famou Oxenden mausoleum in the English burial ground. The other is considerably smaller, but encloses a greater number of the illustrious dead ; the number of sacrophagi in it being twenty-four, and in the larger only fourteen. Those of the Mullas and their preceptors are of marble, the others of cement. They are of the usual Muhammadan form. All have rich silk coverings thrown over them, those of the Mullas being distinguished by an additional covering of white muslin. From the centre of the dome of each mausoleum is suspended a magnificient chandelier, which is lighted up on the anniversary of each mulla's death. The remains of five mullas rest within the splendid edifices. Their names and date of death respectively are as follows :—

Mulla	Nasm-u-din,	died	A.H. 1213	A.D.	1798
,,	Saif-u-din,	,,	A.H. 1232	A.D.	1816
,,	Ezziy-u-din,	,,	,, 1236	,,	1820
,,	Zein-u-din	,,	,, 1252	,,	1836
,,	Bhadru-din,	,,	,, 1256	,,	1840

century fails to describe the great reservoir, 'The memorial of a rich Gentoo's piety, a work not unworthy of Imperial Rome', which the king of Gujarāt did his best to give his name to, but did not succeed. From the descriptions of some of the early travellers of the seventeenth century,[1] it should seem that the water was brought from a distance along a central channel or moat into a space surrounded with walls, and after filling this space, was allowed to pass into the 'mighty pond'. The sides of the moat and the walls of both lakes were lined with stone, a beautiful free stone from Cambay'. Though the outer enclosure would seem to have served chiefly as split pit, the two lakes were apparently built on the same pattern. The larger and the inner lake had, according to Thevenot,[2] sixteen corners, each side one hundred paces in length. The lake was as broad as a musket could shoot. The bottom was paved with large stones, and almost the whole way round, steps, each about half a foot high. rose tier above tier to the level of the ground. In the middle of the lake, to be reached only by swimming or in a boat, was a high building, 'a place for pleasure and taking air'. The work was originally planned to supply Surat with fresh water, and as late as 1638,[3] it still fulfilled its purpose. But the silt must have been rapidly increasing, for in 1666 it was already burdened with six feet of earth, and was said to run a great risk of being choked up, 'if some kindly Bania did not clear it out'. No kindly Bania seems to have come to the help of the lake, and about seven years later Fryer (1673) says it was like a circus, or amphitheatre: 'but', he adds, "if filled with water, the largest ship in the sea might ride in it.' The lake would seem to have been allowed to remain in this state of disrepair till, about 1717, the stones were stripped from its sides and carried off partly to build the outer wall, and partly to make the large well that now stands within the former bed of the lake.[4]

Rustampurā.

XIII *Rustampurā*, south of the Gopī lake suburb, includes about 29 acres of comparatively raised land. Except a few dwellings of backward class Hindus near the outer wall, this suburb was almost entirely inhabited by Parsi weavers in the last quarter of the nineteenth century. In 1817, these people are said to have been well off; but a few years later, in 1822, the entire suburb was destroyed by a fire. Many of the inhabitants then left for Bombay, where their descendants found employment as weavers of silk, gaji and silk-cotton, elaicha cloth. There is a large Pārsī fire-temple in this suburb and

1. See La Valle's (1623) letters, 33-35 ; and Ogilby's (1660) Atlas, V., 211.

2. Voyages, V., 73.

3. Mandelslo, 61.

4. Munshi Abdul Hakim. So thoroughly, was the whole place dismantled that Stavarinus, in 1775, searching about for the 'great pool with Thevenot in his hand, could find no trace of it.'

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a place holding public entertainments. Those buildings were presented to the Pārsīs of Surat by the late Sir Jamshedjī Jeejeebhoy. This suburb also has developed textile cottage industry with power-looms plied in the homes of the weavers.

Sagrāmpurā.

XIV *Sagrāmpurā*, west of Rustampurā and Gopītalāv, and extending along the outer wall from Navsārī to Majurā gate, includes about 200 acres of low-lying land. This suburb was founded by an Anāvil Brahmin, whose house was to be seen in the last century, To the east the houses inhabited by Hindus, are built in rows on land raised several feet above the level of the roadway. In the whole suburb the houses of Brahmins, Bhāvasārs and Banias, mostly Jains, as also those of Khatrīs, and some washermen are well built. The wahsermen owe them to their earnings in Africa. There are, however, many houses of Khatrīs, washermen and of some backward classes like barbers and potters which are little better than huts. Some old type structures having walls of bamboo lathes plastered with mud can still be seen. Towards the west the land is open. Near the outer wall it is divided into fields. But plot after plot of such fields is being pushed into service for small-scale weaving factories worked by electric power. This suburb is only next to Salābatpurā in textile cottage industry. In the south-west large debatched dwellings extend from Majurā gate across Nanpurā suburb westwards to the river. One of these has for over 40 years been the Anāvil āshrama and another for an equally long period has been the Pāṭīdār ashrama. Both these Āshramas have seen many political activities and lay claim to have played the host to first rank political and social leaders including Gāndhījī. This suburb can also boast of the first well planned housing colony in the city, viz. the Ānanda Nagar.

Nānpurā.

XV *Nānpurā*, west of Sagrāmpurā, and stretching along the outer wall from Majurā gate to the river, includes 317 acres of low-lying land. The section of this suburb next to the outer wall is taken up by a line of dwelling houses, generally occupied in the last century by Europeans. Between these and the inner wall, in the eastern part of the suburb, there is much open land of the same character as that of the western part of Sagrāmpurā. In fact, this suburb is the least dense in all the city. West-ward are rows of houses originally belonging to Pārsīs, but of which quite a large number has passed into Hindu hands by now. On the bank of the river are the court-house, the sites of old Sidhi Wharf and the commodore's residence where were the English Wharf and the Dutch Wharf[1] or Walandā Bunder. Here also is situated

1. The first connection of the Dutch with this wharf would seem to have been in 1729, when, under the terms of the charter of that year, the plot of land near the Mecca creek, known as the Jehangir bandar, was, the partly as a gift, partly as a purchase, granted to the Dutch. (Staverinus II., 95). In 1774, this plot of ground, about seven or eight acres in extent, was, except for about two hundred

the General Post Office. Behind this is the Nānpurā market, a comparatively thickly peopled quarter. It was in this suburb that some humble beginnings of great moment were made. In 1824 was opened in the Walandāwād, the first public library which was later on merged into the Audrews Library. Then in a room to the west of the General Post Office the Municipal Committee inaugurated under Act No. 26 of 1850 started its career and worked for 15 years before moving to its present premises. The Sārvajanik Education Society too made its beginning in Nānpurā in 1913. The Vidyā Mandir Women's College affliated to the Karve University and the Jeevan Bhāratī a truely progressive secondary school too are situated in this suburb.

The city with its fourteen scions enclosed by the inner wall and the fifteen suburbs spread between the two walls is cut up into four main divisions by two roads crossing each other at the Burhānpurī Bhāgol, which has consequently been the hub of the city. One of these, constructed in 1865-67 and known generally as the main road runs from Chowk Bazaar to the railway station in the east throwing apart northern and southern divisions of the city. The other road runs from Navsārī gate in the south to Variāvī gate in the north overstripping the Koṭsāfil road in its course. The whole of the city is at a rough level of 100', except certain areas known as Dhed Talawadī and Gāstipurā which being as low as from 80' to 85' are the first to suffer in heavy rains.

To the east of the city, between the railway station and the outer wall, a suburb began to develop in the last quarter of the preceeding century. Well laid-out from the outset, it has a broad road-way separating the railway station from a roomy travellers' rest-house and a crescent shaped row of large and regularly built dwellings. Till lately this road-way encircled an open plot of ground cultivated into what was known as the Hope garden. But of late the roadway, to cope with the ever-growing traffic, has been widened to stretch across the garden leaving a bare segment thereof. The suburb has extended to the north up to the road leading from Lāl Darwājā gate to Varāchhā on the other side of the railway. From the railway to the Lāl Darwājā and further north-west along the outer wall to Vadatāl Devadī the road is lined with well-built quarters for dwellings and offices, shops, steam cotton-presses, and small and medium scale spinning and weaving factories. Nearest the

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and forty yards along the bank of the river, covered with buildings. At the west was the director's house, and east of it on the river bank, an open space with an 'ensign staff', and behind the staff four one storeyed dwelling-houses erected about 1770 by 'leave of the English and Moors.' Along the river bank, for about two hundred and forty yards, the Dutch built a stone wall, rising four feet above the level of the river bank. In the wall were two gates, and in front of each gate a pier-head jutting into the river, where goods were discharged and shipped, and vessels lay afloat. It was afterwards found necessary to protect the wall, by building wooden piles, to break the force of the stream.—Stavorinus, III., 159.

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railway track on this road are situated Shri Ātmānand Sarasvatī Hospital and Pharmaceutical works and the Ochhavlāl Nāzar Ayurvedic College. On the same road to the east of the railway line too are some major textile factories. The part of the suburb to the west of the railway track is within municipal limits.

The other remarkable outgrowths are to be noticed outside Navsārī, Majurā and Āthwā gates. A little away from Navsārī gate and near the railway station of Udhna is a small colony of private dwellings and labour quarters built by Government. Outside the Majurā gate the Pāñjrāpol a shelter for old and infirm cattle and other lower animals, has a record of service that goes considerably back in history. Between Majurā gate and the Pāñjrāpol, is Dr. Sorābjī Gāndhī and Dr. Sarosh Gāndhī College of Engineering and Technology for Diploma and Certificate courses. Beyond the Pāñjrāpol the road turns north-west and is then called *Ghod-dod* after the spontaneous races of vehicles held on its course in bygone days in the month of Śrāvaṇ. At the far end it joins the Surat-Dumas road, before its confluence with the Ghoḍ-dod road, Running west from the Āthwā gate this road leads past the Vanitā Vishrām, the Seventh Day Adventist Hospital and Church, then past a spacious public maidan nearest the river and the colleges of the Sārvajanik Education Society with their hostels and play ground, Sir Kikābhai Premchand Library, onwards past the Police Headquarters and Police Canteen and further past a jain temple of architectural beauty with a sanitorium attached to it. At that end there is also another sanitorium viz., the Bhāratīya sanitorium. The jain temple and some palatial bungalows with well-laid out gardens two of which are at present the property of the Vithaldās Gurukul High School, lend a charm to the strip of the road.

With the city wall from Majurā gate to Āthwā gate as the base the two roads make a rough tringle, the immense area of which has developed as a township of laid-out colonies with villas and bungalows that is steadily drawing to itself moneyed and cultured families of the city.

The outer Wall

Towards the close of the Emperor Auragzeb's reign (1707) Surat was harassed by the attacks of the Mahrattas and other bands of free booters. To protect themselves from this danger, the people of Surat, about half a mile outside of the city walls, built sconces and set cannon on them.[1] For about ten years no attempt would seem to have been made, by connecting them with a line of walls, to convert these sconces into a permanent defence. At last Haidar Kulī Khān, governor of Surat from 1717 to 1719, with the help of the stones from the Gopī pond, set to work to complete on outer line of wall. The part first built was the south-west corner, the site of the court house which

1. Hamilton's New Act, I, 184.

at present is owned by Dalīchand Veerchand, and before the end of his governorship the fortifications were completed as far as the Delhi gate. Tahwar Khān, the next governor, began to build from the north-east near the *Rafi* towar. This governor made the Variāvī gate, and completed the line of fortification, calling it Ālampanā or the shelter of the world.[1] The length of the wall is altogether about five and a half-miles.[2] it contains twelve gates. Towards the north-west, the Falak; towards the north, the Variāvī and Kabargām; towards the north-east, the Lāl and Delhi ; towards the east the Sarā; on the south-east, the Salābat and Man ; towards the south, the Navsārī, Jāfar Alī, and Majurā, ; and towards the south-west, the Āthwā gate.

In 1817 the north-western portion of the wall was unlike the rest, only 6.5 feet high, and form three to four feet thick, and in some places, consisted only of strong wooden piles. In the north-west corner was the *Rafi* tower[3] made of stone. From the *Rafi* tower, as far as the Variāvī gate, the wall was broken down ; but beyond that it was in good order, with a parapet and rampart. The thickness of the wall varied from seven to eight feet, and the height from fourteen to twenty feet, Above each gate was a platform , roofed over and furnished with guns. Besides forty-eight batteries and towers, these platforms were from twenty-five to thirty feet high. The narrow wall along the north-west face was swept away[4] by the flood of 1822, the wood piles only remaining. Of the *Rafi* tower only the foundation is now to be seen.

In the last quarter of the nineteenth century the wall from the *Rafi* tower to the Variāvī gate was in ruins ; but further east, from the Variāvī gate to near Lāl Dārwājā, it was in good order.[5] Near Lal Darwājā, and in many places between it and Delhi gate, the wall was in ruins. South of Delhi gate, which was removed during 1865-67 to make room for the broad station road, was more than one long breach in the wall. It was through these breaches that, in 1822 and 1837, flood

1. Unlike the portions within the circuit of the inner wall, the river bank between the outer and the inner walls, would seem to have been left unfortified. In 1762, when Dutch were forced to move their head-quarters from their lodge in city to the Jahangir wharf near the Mecca creek they had to protect the river bank by building a wall of stone—Stavorinus, III, 54.

2. Committee's report to Government, dated 11th June 1800.

3. This building is also called the French tower- why, it is difficult to say According to one account, it was built because the castle was found an imperfect defence. But it would seem to have part of the plan of the outer wall, as it was raised in 1719 by one Mirza Raffi-ud-din—Munshi Abdul Hakims History.

4. Mr. Bettingtons Minute on the flood of 1843.

5. In 1837 between the Wariawi and Katargam gates, 222 feet were washed away but this breach seems then to have been repaired.

waters forced their way into the city of Surat from Varāchhā. Further south, in the wall near the Sarā gate, is a large step-well, said to have been one of the wells which watered Surat when the site of the city was still garden land. From this point to near Jāfar Alī gate the wall was intact. Further on the curtain had been removed, the top of the walls forming a pathway about eight feet broad. About 500 feet beyond Majurā gate was a breach in the wall 153 feet long, a relic of the flood of 1837. To the row of large wooden piles with which this gap had been fenced a brick wall, about four feet high, was in 1869 added. Further west was the Āthwā gate, removed to make room for the Dumas road. Between Dumas road and the river bank the wall was in good order. Such was the state of the circuit of the outer wall in the last century but the great flood of 1883 reaching the level of 1001 feet led the municipality to take protective measures and since then the breaches in the wall have been filled up and the whole circuit is now kept in good order.

History

Surat is popularly believed to have been founded by Gopī, a Nāgar Brahmin, who rose to be the prime minister in the Sultanate of Gujarāt under Mahmud I and Muzaffar II. On account of this belief Gopī is generally called the patron of Surat. But it appears that though the importance of Surat was much enhanced through the efforts of Gopī, the town was already well founded in his time, and towards the end of his career, well on its way to prosperity. Close upon Gopī's death, Duarate Barbosa referred to Surat, in 1515, as a port next only to Rānder and returning large revenues of customs to the court of Gujarāt. In fact, there are earlier references to Surat, which, though stray, compel consideration. Kahānadde Prabandh a book of verse in Gujarātī with Allāuddin Khiljī's raid on Gujarāt for its theme, which was composed in 1456, refers to Surat and Rānder. Sikandar, the author of Miratte Sikandari, gives us to understand that in 1410 A.D. i.e., towards the close of the Sultanate of Muzaffar I of Gujarāt, Mastikhān was governor of Surat and Rānder. In both these links Surat has come to precede Rānder. Dr. Alfred Master goes further back to say that in 1391 Zafarkhān on his appointment as Subā of Gujarāt had a military outpost struck in Surat. There is also another reference crediting Firoz Tughluk with building in 1373 a small fort to keep away the Bhīl marauders, and one more to say that Emperor Muhammad Tughluk plundered Surat in 1347 on his way to Deogīrī. These last two are the earliest to Surat so far known. They lead us to reject the popular notion that Surat came into being with Gopī and to put the beginning of its history in the early part of the fourteenth century, and of its material growth in the fifteenth century.

After Gopi is heard the name of Khwājā Safar Salmani, entitled Khudāwankhān, an Albanian Christian turned Mohammedan, who rose to eminence in the court of Gujarāt and built

in 1546 the castle at Surat to keep at bay the Portuguese who had thrice pillaged Surat (in 1530, 1531 and 1555) and had dealt the death-blow on the prosperity of Rānder. About ten years after the raising of the castle, the Sultanate of Gujarāt began to fall to semi-independent fiefs. Surat was then a part of the jagir of Broach under the control of Malik Arsalan Imadul-mulk, who came later (1559) to be murdered in the castle by his wife's brother Rajab, Khudāwandkhān junior. Changīzkhān succeeded Imad to the fief. Seaking to be revenged for his father's murder he negotiated with the Portuguese for help and thus started a process that culminated in 1800 in the passing of Surat into Western hands viz., the English. Changīzkhān on the other hand ignored the power of Emperor Akabar and gave shelter to the latter's vouched enemies, the Mirzas, who on the death of Changizkhan made themselves masters of his territories one of them Ibrahim Mirzās, holding sway over Surat. To punish him Akabar marched upon Surat and took possession of it, in 1573. The victory on the part of the Mughal Emperor inaugurated some from of stable government in Surat and started a steady march to her heyday.

Surat had its own mint and the Mahmudis struck there were in circulation in the districts of south Gujarāt. till 1688. In the beginning of the seventeenth century other European nations appeared on the scene. The English opened their factory at Surat in 1613 and the Dutch in 1620. Already in the reign of Shāh Jehān, Surat had reached a very high mark of prosperous trade, her harbour at Swally Hole crowded with ships of five hundred tons and more, discharging and loading merchandise from distant quarters of the world. Then came the great famine of 1630-31 known generally as the *Satyāśio* after the corresponding V. S. 1687, the effects of which were to be noticed for nearly ten years following it. But at the end of that period prosperity returned and attained new heights. In 1644 was built by Hakikatkhān the Sarai which at present houses the municipal hall and offices and in 1645 was re-built on a new site the Jain temple of Chintāmaṇī Pārśvanāth, both these clear evidences of stable progress. The regime of Aurangzeb twice saw the sack of Surat at the hands of Śivājī Mahārāj, (1664 and 1670), but though they carried away to the tune of some crores neither the trade at Surat nor the morale of the traders would seem to have been affected. Even the later raids of Mahrattas though they greatly disturbed peace and production in the districts, could not to any perceptible measure slacken the swing of trade at the port.

Ever since the conquest of Surat by Akabar, the Mutasaddi or governor of the city and the district as also the killedar or the commander of the castle and the army were from time to time appointed by the Mughal Emperor. With the death, however, of Aurangzeb in 1707 the hold of Delhi began to

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weaken and though for some time firmans for such appointment were formally issued from Delhi the governors of Surat sought more and more to be free from the control of the imperial throne.

Sorābkhān who became the Mutasaddi in 1725 styled himself the Nawāb of Surat and so did his successors. A constant scramble for power was started and the politics at Surat became the fish-pond for local grandees like Mulla Mohammad Ali Panchashi and Ahmed Chalbi, and for the Nizam, the Peśwā and the governor of the East India Company at Bombay. Teg Beg Khan who wrangled with Sorābkhān for the nawābship was finally secure in the position, only after a very hard struggle. Of all the nawābs of Surat he stands out as one who commanded the position he occupied. His time is also marked out as the period when the ship-yards of Surat worked at full capacity. After him Safdar Khān and Mohinuddin *alias* Mia Achchan carried on a long struggle for the nawāb's gādī. Meanwhile Hāfiz Ahmed Khān the Sīdī commandant of the castle had thrown very powerful and proved a head-ache for Mia Achchan as also for the English. Captain Mateland and Captain Watson commissioned by the governor of Bombay sailed down to Surat and after a short engagement with the forces of nawab and the Sīdī drove the latter out of the castle. The English became masters of the castle on March, 4, 1759. The two later nawābs Hāfizuddin and Nizāmuddin were only nominal rulers, much of the control of affairs being held by the English. When Nizāmuddin died in 1799, the English made the most of the opportunity and in 1800 finally took over full control of the city and the districts.

After the assumption of the entire control of the city by the British (1800), happiness and prosperity are said to have prevailed in Surat. But this time good order and revival of trade did not last long. In 1813, driven south by the famine in northern Gujarāt, crowds of idle and diseased immigrants from Cutch and Māḷwā, 'by long habit addicted to thieving and the commission of every crime,' caused much injury to Surat. Trade had, also, during these years been steadily passing to Bombay, and inspite of a brief season of prosperity in 1815, so greatly had Surat lost its importance , that, of the 6,00,000 inhabitants of 1798, in 1818 only 1,57,195 remained. In 1818 trade was active ; but this year of speculation was followed by a period of great depression. In 1825, though the city was still 'very large, with lofty houses overhanging its narrow winding streets', its trade was trifling, consisting of little but raw cotton shipped in boats to Bombay. With the exception of the Bohras and the Parsis, 'dismal decay, ' overtook the merchants of the city, and in the dearth of employment the entire population had dwindled down to 1,24,000 souls. During the next twelve years (1825-37) trade continued slowly to decline, and the city from year to year, by little and little, grew poorer.

In 1837 two great calamities, the fire and the flood, destroyed the greater part of the city, reducing almost all classes of the inhabitants to a state of poverty. For more than a year nothing would seem to have been done to repair the city. In 1838 (December) it is described as 'but the shadow of what it had been, two-thirds to three-fourths of the city having been annihilated'. But during the next two years (1838-40) the fortunes of Surat began to mend. From 1840 its trade improved and increased steadily from year to year. In 1847, though the city walls were still dilapidated, the public gardens uncared for, the streets filthy, and the population 'at the most not more than 80,000 souls', lines of houses most of them it is true, of the cheapest materials had been raised, and the Bohorās, had renewed their quarter of the town 'with large well-built dwellings, with every regard to light and ventilation'. By 1851, the population had risen to 89,505. In the following years, as trade continued to increase, the city gradually recovered some of its former prosperity till, in 1858, its position as the centre of railway operations in Gujarat gave Surat a sudden increase of wealth and importance. Large sums of money found their way into the city, and before the reaction had set in, the American war had broken out, and the rapid rise in the value of its produce again made Surat a rich city. Too closely connected with Bombay to escape unhurt from the financial disasters of 1865-1866, the merchants and men of capital in Surat, were, inspite of their losses, able to keep a considerable part of their wealth. As the value of agricultural produce had still declined but little, and as no other investment seemed safe, a large amount of capital was in these years, and as late as 1869, invested in the purchase of land in Surat and its neighbourhood.

Since 1869 the fall in the prices of agricultural produce had reduced the value of property in Surat. Trade had declined, and, with the loss of employment, the price of labour had fallen. At the same time the condition of Surat in the last quarter of the nineteenth century was by no means one of general depression. The activity of some branches of its manufactures, and the successful establishment of steampresses and factories, gave good employment to many of the poorer classes. The large sums they spent on their feasts and in improving their dwellings showed that, among the middle and upper classes, wealth was considerable ; and its well-kept streets, its public buildings, and its park, gave the city an air of general order and prosperity.

Famines

If Surat has seen long period of prosperity and splendour, they were punctuated with sweeping calamities like famine and pestilence, flood and fire, that attained a grim frequency in the nineteenth century. The great famine which raged in Gujarāt in 1482 also affected Surat. It was during this famine that Gopī opened major building works, probably those of the Gopī Talāo, to feed the hungry in Surat. Famines were frequent right up to the end of Aurangzeb's regime, but the next one of which mention

is made was what raged in Gujarāt in 1573-74, and even of that it cannot be ascertained how far it affected Surat and the district. More than fifty years after, came the famine of 1630-31 called the Satyāśio after the corresponding Vikram Samvat year which took heavy toll of life in Gujarāt and Mahārāṣtra. During this famine Langarkhanas or public kitchens were opened in Surat under imperial orders, and with state aid corn dealers were given an impetus to import foodstuffs, but these measures could hardly have touched more than a bare fringe of the appalling distress. Indeed for the whole decade following it the consequences of the calamity were percepitible on the trade and industry of Surat. Again after a few years the monsoon of 1663 left Surat dry. In its wake the famine of 1664 followed. Pestilence spurted up the death rate, particularly among the Hindus and Pārsīs. This again was followed by as many as six droughts or famines during the fifteen years from 1681 to 1696 and they were normally attended with pestilence. The most horrible of these epidemics was the one of 1684. Then came the famines of 1733 and 1747 that raged in Gujarāt but there is no information to help us judge their rigour in Surat. Later came the famine of 1790 popularly known as the *Sudatālo* which was as horrible as the Satyāśio of 1630-31 and consequently stopped up migration of the people to Bombay. Both Narmadāśaṅkar and Eduljī Patel have left vivid pictures of the horrors of the famine, which was attended with pestilence. The famine of 1804 or the *Sāṭho* was comparatively mild. A more dire distress came with the famine of 1812-13 or *Agṇotaro,* but on account of prompt relief measures taken in Surat, its edge was blunted in south Gujarāt. In fact crowds of people from Cutch and Māḷwā were driven to Surat and the district.

Earthquakes

Surat has happily been free from disastrous tremours of earthquakes, though history records four earthquake in the preceding two centuries *viz.,* in the years 1747, 1819, 1864 and 1871. Of these the one in 1819 lasted for three minutes and affected many buildings.

Cyclone

In the year 1782, according to one source on the Ashadhi Ekādaśhī of V. S. 1838, a vehement wind swept over Surat and in the twinkling of an eye turned to rubble and dust the minaret of Khwājā Dānā built about 1530, the arch of Burhānpurī gate in the inner wall and hundreds of rich and poor dwellings and trapped to death a large number of people, no less than seventy being killed under a single roof. The storm also caused havoc on the nearby sea and in the district. Another cyclone visited Surat in 1800 and caused heavy losses at sea, and still another appears to have blown over Surat in 1872.

Floods

Of floods Surat has a long and dismal tale. The earliest known that came in 1727 swept over the city and suburbs and rose to the roofs in some quarters. The next one came in 1782 followed by an equally terrific spate in 1810. But 1822 brought

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one of the worst floods in the Tāpī which came from Varāchhā forcing its way through the breaches in the outer wall and itself swept away the narrow wall along the north west face. It caused heavy losses in person and property. Then followed another flood in 1835 attended with heavy rain and storm of wind. It brought down five hundred dwelling, and carried away twenty five souls. Again towards the close of the rainy season (29th August) in 1837 the Tapi rose to a height greater than ever before, flooded almost the whole of the city, and for miles round covered the face of the country like a sea. Before the waters subsided, the city had lost eighteen in men, and Rs. 2,74,550 in property and fresh long breaches had sprung in the outer wall. Having to followed close upon the great fire, the flood left the prople of Surat almost helpless. Later floods were comparatively mild. Those of the years 1843 and 1849, though they swept over the city, did not cause any serious destruction. But again in 1883 people were reminded of the floods of 1822 and 1837. The river in spate rose to a height never reached since *viz.*, 100' 1". Nearly three fourths of the city was under water for two days. Two hundred and fifty houses were destroyed and the total damage caused was to the tune of twenty lacs. Happily there was no loss of life.

The following table shows the great floods in the river Tāpī since 1875.—

Year	Highest level reached.	Remarks.
1878	96' 7"	Duration 4 days.
1882	97'	
1883	100' 1"	The highest limit ever reached.
1884	98' 3"	
1894	97' 7"	Duration 5 days.
1914	97'	
1930	97' 5"	Duration 5 days.
1931	95'	
1933	98'	
1937	95'	
1939	92'	
1942	98'	
1944	100'	Duration 11 days. The maximum period noted so far.
1945	98'	
1949	97' 6"	Duration 5 days.

Note.—The level is considered dangerous when it exceeds 90'.

Measures taken for flood protection

In 1869 as a flood protective work the Municipality constructed the Makai Bridge with a sluice value arrangement at a cost of Rs. 42,000. Further during the period from 1869 to 1875 the Municipality spent about Rs. 2,22,000 after various flood protective works, and they could withstand floods up to 96.5

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feet. After the flood of 1883 a scheme costing Rs. 1,78,472. was executed which afforded better protection. The Municipality also took advantage of the Gopī Talāo for emergency diversion of flood water. All these measures have so far proved effective.

Fires.

Prior to the year 1822 no information about fires is available, though the Portuguese and the Marathas are known to have set fire to the city during the pillage they inflicted upon Surat. In the civil strife of 1750 when Alī Nawāz Khān attempted to storm the durbar house of Miyā Achhan some sight-seekers with a leaning for the former are said to have set ablaze parts of the city and thereby to have caused the innocent public to suffer heavily in property. But even for that no further details are available.

The first fire known with its local and gravity appeared at 4-0 P.M. one afternoon in 1822 in Kāligarwāḍā a western quarter of Rustampurā inhabited mostly by weavers. It spread over the Pārsīwāḍ and is said, in a few hours, to have gutted about a thousand dwellings. The whole suburb was reduced to ashes and the cloth-traders and weavers of the locality who were observed in 1817 to be leading a happy life found themselves paupers overnight.

But the most serious fire in all the history of Surat was the one that broke out in 1837. On Monday, 24th April, at 5 P.M., one of the hottest days of the Surat hot season, in Machhlipith. one of the richest and best-built quarters of the city, the dwelling of one of the leading Pārsīs was found to be on fire. A jar of boiling pitch had been spilt, and some of the wood-work of the house was in flames. The unpopularity of the owner of the house—according to one account, was the cause of the fire. The helplessness of such of his neighbours as were willing to stop the fire would not do so as Pārsīs could not quench it with water. the lofty, closely-packed houses with their frameworks of timber, and their heavy wooden eaves overhanging the narrow winding streets, were enough, without the help of a 'fresh breeze from the north', to raise a conflagration that, within a few hours. covered an area of three miles. So fierce was the fire that when night closed in, from a distance of 20 to 30 miles across the Surat plain, heavy masses of smoke lit up by flatshes of flame, were seen hanging over the city. In spite of the stillness of the night, the fire kept spreading. In the heart of the city it raged so fiercely, that nothing could escape it. So far the progress of the fire had been steady and gradual and before they were burnt many of the dwellings had been striped of what was of most value in them. But at daybreak on Tuesday (April 25th) a breeze sprang up from the north west. Before it the flames speedily forced their way to other parts of the city hitherto deemed safe. Here, huddled together and unprotected, the fire enveloped most of the property that on the previous day had escaped the flames, dashing suddenly across the only entrance

to the Jhāmpā while the men were away helping in another part of the town, destroyed, with many of the women and children, the handsome dwellings and mosque of the Bohras. About two O'clock on Tuesday afternoon the fire was at its height. From that time it declined but continued to rage till Wednesday morning (26th). When the fire was over, besides many who were supposed to have perished in the ruins, the bodies of forty-nine dead were found. On Tuesday morning, 32 lost their lives in trying to save property, and ten were found to have thrown themselves into wells and ponds. Of the total loss of property no estimate could be framed. But 9,373 houses were destroyed and this, at an average of Rs. 500 a house, gives a total sum of Rs. 46,86,500. Of the whole number of houses destroyed, whose ruins stretched along about 9.75 miles of thoroughfare, 6,250 were in the city and 3,123 in the suburbs. The misery of the people was somewhat relieved by the grant of Rs. 50,000 from government, and from a private subscription of Rs. 1,25,000 collected in Bombay.

The wholesale destruction caused by the fire and the flood of 1837 opened up vast areas and thereby left the city less exposed to widespread fire. At the same time there were areas untouched or barely touched by any of the preceding fires. These came to suffer more or less in the later period. In 1842 broke out a serious fire[1] and another in 1848, the latter having reduced to ashes it is said, as many as 400 houses in Līmdāchowk and Burhānpurī Bhāgol area. The dates of other fires are not available but there were some major ones that individually brought disaster upon Machhīwād, Luhārpol and Nānpurā Bazar. Navsārī Bazaar and Burhanpuri Bhagol suffered more than once. Then in May, 1869, sixty two shops in Chowk Bazaar were burnt to ashes in a fire that caused a loss of Rs. 35,000 worth of property.

But the greatest of all fires since 1837 broke out in 1889. In fact it was a chain of fires of which the first made its appearance at 2 P.M. on April 6th in Dīnshaw Khurshedjī Kātpītiā's shop at Burhānpurī Bhāgol. Leaping out of a pitch set to boil, just as in 1837, the fire set ablaze the shop stuffed with other combustibles and stacked with grass on the loft overhead. Fed by a breeze it spread on to the shops of other Kātpītiās or vendors of debris-timber. By sunset Bundelawād, Ruwālā's Tekro, Kansārāwād and Haripurā all showed a raging conflagration the blaze of which could be seen from twenty miles around. At last the fire slowed down, but before it was finally put out late in the night, it had undone half a century's economic progress of some very rich quarters. Eleven A.M. on the morrow showed another blaze

1. Dr. Ratan Marshal has in his book Ardeshir Kotwal (p. 40-41) that the fire of 1842 burnt down Swaminarayan mandir and many houses and that it worked in Saidpura, Salabatpura and Nanpura. For this Dr. Marshal has cited the authority of Bombay Samachar dated 10-3-1842. But the three suburbs are too far apart. Besides I have no information that the Swaminarayan Temple was ever burnt to ashes. For these reasons the local of the fire is omitted. For the fire of 1848 I have accepted the details given by Dr. Marshal.

in Salābatpurā which trapped and gutted fifty houses. Before that could be put out the house of a Bhandārī in Sagrāmpurā which was slacked with grass and fuel went up in flames at 3-30 P.M. the same day. The fire spread and once again the Pārsee area of Rustumpurā passed through a scorching trial. In all 48 houses were reduced to ashes, eight among them belonging to Pārsees and the rest of Bhandārīs, weavers and Mohammedans. The piteous condition of the distressed touched the hearts of the charitably disposed Suratīs settled in Bombay and once again they ran to their succour.

THE TABLE BALOW SHOWS THE FIRES RECORDED IN THE MUNICIPAL REGISTER.

Year.	No. of fires.	Damage in Rupees.	Remarks.
1869-70	20	36,998	The fire in Chowk Bazaar destroyed 62 shops: date 8-5-1869; damage Rs. 35,000
1871-72	18	1,01,525	
1872-73	15	52.420	
1883-84	10	35,000	
1884-85	15	3,000	
1885-86	19	4,38,167*	
1886-87	15	16,000	
1887-88	21	17,000	
1888-89	17	1,16,755	
1889-90	20	15 83,146	The big fire that broke out on 6-4-1889 destroyed about 3,000 houses and shops in and about Burhanpuri Bhagol: damage Rs. 15 lacs; area covered 1,30,438 Sq. yds.
1896-97	29	2.67,026	By the fire on 8-3-1896, seven persons were burnt to death: 71 houses affected; damage Rs. 47,046.
1903-04	22	3,19,095	By the fire on 28-3-1904, 508 houses and shops suffered; damage Rs. 2,87,649.
1904-05	34	1,85,257	
1908-09	23	1,01,050	By the fire on 16-4-1908, 92 nouses were burnt is salabatpura; damage Rs. 88,585.
1921-22	6	1,91,635	
1923-24	21	1,05,735	
1924-25	10	3,00,198	The fire on 30-3-1924 caused damage to the tune of Rs. 2,86,000 burning most of the Lakkad-kot on the station road.
1942-43	31	20,927	
1946-47	27	1,74,155	
1949-50	28	1,35,800	By the fire which broke out in Anand Nagar Society on 28-1-1950 four persons were burnt to death.

Measures taken for protection against fires.

Before 1875, carts with barrels full of water were kept ready at prominent places within the city. Then in 1891 all the fire-brigade stations were connected by telephone. Later in 1896 fire hydrants were provided at several places. In 1905-06 two steam fire engines drawn by horses were purchased. In 1926 a fire engine (motor) was purchased. The present fire-brigade establishment is up-to-date and efficient.

*Edulji Patle gives damage of Rs. 4,48,000 though he too claims to have based his figures on Municipal records.

TIMBA

Ṭiṁbā (Kāmrej T., 21° 15' N, 73° 05' E:p. 1,104) is a small village at the junction of the Naradgaṅgā with the Tāpī river. There is a temple of Mahādev where a pilgrimage is made once in twelve years at the occultation of Jupiter. The waters of the little river are named after a saint and are supposed to issue from the roots of an *umbar* tree (Ficus glomerata). Here is the temple, and it is frequented by people who are unable to go so far as Nāsik. The sanitary arrangements are made by the village panchayat.

Unai Hot springs

Unai-Hot Springs : These[1] springs are situated in the south-western extremity of the Vyārā taluka and their name is significant. For in the forest on the south bank of the Aṁbīkā river there is a tank, banked with stone and from 20 to 25 feet square full of such hot water (123° to 124° Fahr) that a white stream rises from its surface and no man dare bath in it. To make it endurable the water is dashed from a certain distance over the bodies of the votaries who come to the temple of Aṁbā situated on the edge of the tank. Except this reservoir and another designed to receive any overflow, there are no other hot springs; but in the neighbourhood is a well which contains tepid water. The tank water has been analysed and found to contain lime, sulphates, chlorides, and free ammonia. In one gallon there were 20 grains of mechanical impurities, and, as regards chemical impurities, the solid residue contained 13½ grains of organic matter and 53½ grains of soluble minerals. The water smelt strongly of sulphur and in one gallon 4.6 grains were discovered. The Unai railway station is on the Bilimorā-Waghāi line of the Western Railway.

These springs are held to be as ancient as Rāma, and the origin of an important caste is connected with them, viz,. of the Anāvalās also termed Bhāthelās or Mastāns.[2] The Desais of Gaṇdevī and Mahuvā are of this caste. Its origin, according to the *Skanda Purāṇa* is as follows : Rām, returning with his wife Sītā from Lanka in his triumphal balloon Puṣpakvimān, caught sight of the hermitage of the saint Agastya which was on the southern slope of the Vindhya hills. He visted him, and at his bidding performed a solemn act of expiation at *Anadishidha* for the slaying of Rāvaṇ. This spot was Anāval and then there were no Brāhmaṇs, but a Bhil named Mānik lived there in the forest. Brāhmaṇs therefore, were summoned from Gaṅgākulgiri in the Himālayās, and for their comfort a spring of hot Ganges was given them by Ram, who shot an arrow into the ground. The great sacrifice was performed at or near the temple of Sakaleśvar Mahādev on the Aṁbīkā, and to these days its ashes may be seen, a white or gray

1. Extract from a lecture given by Mr. Janardhan G. Gadgil, Judge of the Varishta Court.

2. Wilson says that the first name is that of a village near Bansda, that the second is given because they raise rice, the third is common to many cultivating Brahman families, and is the same as Mahasthan (great country),

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deposit in the river-bank, in reality composed of silica, iron and traces of lime. The Brahmans numbered 12,000 men, belonged to twelve different clans or *gotras*, and married the 12,000 daughters of Shesh. They should have accepted the god's *dakṣiṇā* without bargaining, but they did not, and therefore a decree was passed on them that they should become degenerate, and should lose the privileges of receiving the *dakṣiṇā*, teaching the Vedās and performing sacrifices. Like mere Vaisyas they should cultivate the soil. Such was origin of the Bhāthelās or Anāvalā caste of which the sub-divisions are the Naiks and Vāsis.

The great gathering for purification takes place at Unai on the full-moon day of *Chaitra* (April-May) ; it is composed of people from the forest and people from the plain ; it unites business with religion. It is said that a hundred thousand persons thus meet for a week some to throw the holy water at each other with cries of *Jaya Ambā*, others to visit the booths and shops. Traders and pedlars come from Surat, Bulsār, Bansadā, Navsāri, Chikhli, Gandevi, and Mahuva in the Surat district, Bombay, Khāndesh, the Dangs, Nasik, and other neighbouring districts.

VAUX'S TOMB

Vaux's Tomb (Chorāsī T.) On the right bank of the Tāpi near the mouth of the river, is a useful landmark for vessels sailing up the Tāpi to Surat. The dome, about 30 ft. high, built in the Muhammadan style, is that of the tomb of an officer named Vaux in the East India Company's service till 1695, who rose from the position of a book-keeper to that of Deputy Governor of Bombay. In 1695 he was suspended from the company's service on account of suspected traitorous relations with the French. In 1697 he and his wife were enjoying a sail on the Tapi, the boat was upset, and both of them were drowned. Close to this tomb is an old temple of Sikotrā Mātā. A light house stands near the tomb. The village in which the tomb is situated is called "Hajīrā" (meaning 'tomb'). A couple of wells in this village have mineral waters containing sulphur and iron, which impart digestive properties to the waters. The place is expected to develop as a health resort. The civic affairs of the village are managed by a village panchayat.

VEDCHHI.

Vedchhī ((Vālod Peta ; 21° 00' N ; 73° 15' E. p. 860). There is an Āshram here established in 1928 by Sri Jugatrām Dave. The Āshram is taking keen interest in Nai Tālim, Bhudān Sarvodaya and other activities.

VYARA.

Vyārā (21° 05' N, 73° 20' E ; a. 2.5 square miles ; p. 9,169) is the headquarters of the Vyārā taluka and is a railway station 39 miles east of Surat on the Surat-Bhusāval line of the Western railway. Vyārā is a small but well developed town.

According to the census of 1951, in Vyara town the agricultural classes numbered 1,553 and the non-agricultural classes

7,616. Of the latter 1,962 persons derived they principal means of livelihood from production other than cultivation, 1,563 persons from commerce, 34 persons from transport, and 4,057 persons from other services and miscellaneous sources.

Vyārā is a municipal town. The municipality was constituted as a 'B' class municipality under the old Baroḍā State, but after the town's merger in the Surat district it has come to be governed by the Bombay District Municipal Act (III) of 1901. The municipal council is composed of 15 members, all elected. Two of the seats are reserved for women and three are reserved for the Scheduled Castes and Scheduled Tribes. Besides the managing committee, there are four other committees incharge of (1) sanitation, (2) public works, (3) gardens and (4) water works. The total income of the municipality in 1954-55 (excluding extraordinary and debt heads) was Rs. 1,30,094 composed of municipal taxes Rs. 92,021, income from municipal properties and power apart from taxation Rs. 16,079 ; Government grants Rs. 18,315 and miscellaneous Rs. 3,679. The total expenditure during the same year(excluding extraordinary and debt heads) was Rs. 1,39,308 comprising general administration, Rs. 21,432 ; public safety Rs. 8,585 ; public health asnd convenience Rs. 69,744, public works including roads, R. 26,078 ; contributions to educational institutions, Rs. 2,000 and miscellaneous Rs. 11,469.

In 1954-55, the number of houses in the town was 1,805 having a capital value of Rs. 1,06,16,842. The municipal water works, about 30 years old, is situated on the bank of the river Mindhola. Water is brought from the catchment area to the Doswada tank. Water flows by gravity through a *katcha* canal into two settling tanks near the water works. The water is then filtered through rapid sand filters and pumped to a reservoir of 21,000 gallon capacity. There are ample public stand posts and more than 300 house connections. As the supply at present is insufficient to meet the needs of the town a scheme costing four lakhs of rupees has been prepared and submitted by the municipality to Government for sanction (1955). There is no drainage system within the municipal area. There are more than three miles of metalled roads and nearly twice of unmetalled roads in the town. The town is lighted by more than 200 electric lights., power for which is provided by an independent co-operative body. Compulsory primary education in the town is managed by the Surat District School Board, the municipality contributing its statutory dues. The municipality owns a fire fighter coasting Rs. 30,000. There is a Government dispensary. By the side of a beautiful lake, a municipal garden and playground for children, costing about Rs. 20,000 is being laid out (1955). There is a public library, called Sārvajanik Library, which provides a separate section for women and children. There are no burial or cremation grounds within the municipal area.

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Doswada

Doswada (T. Songadh, 20° 05′ N, 73° 30′e ; p. I, 460) situated on the way in between Vyara and Songadh, Doswada is an ancient village. It has a fortess with a big pond adjacent to it. From this pond are dug up small canals which supply water upto Vyara.

ANAVAL

Anaval situated on the bank of river Kaveri Anaval is an ancient village and a health resort. The temple of Shukleshwar Mahadev, God of Anavilas, is located here. It also contains many Dharma- shalas. The coins which were in circulation during the Sultan dynasty of Gujarat have been excavated from here.

PARDI

Pardi (T. Pardi, 20° 00′ N, 72° 55′ E, p. 9,422) Pardi, the principal town of Pardi taluka, is well-known for its ancient fort. Recently its importance has increased on account of the location in this village of the *Vedashram* of Shri Satvalekar, a reputed scholar of Sanskrit.

VAPI

Vapi (T. Pardi, 20°, 20′ N, 72°, 50′ E, p. 9,044). is situated on the border of Gujarat and Daman. A big custom-house and training college for males and females are located here.

MAROLI

Maroli (T. Navsari, 21° 00′ N, 72, 50′E; p. 1,492) A lunatic asylum, managed by Kasturba Sevashram which is a social service organisation, is located here. Patients from various parts of the country take its advantage.

VARIAV

Variav (T. Chorasi, 21 15′ N, 72° 45′ E, p. 2,735) a village on the north bank of the Tapi river, is about six miles from Surat. The Borah Musalmans of this village, like those of Kathor, are enterprising merchants who generally trade with Mauritius, Natal, Rangoon. Singapore, China and other distant places. The *dholi papdi* (Dolichos lablab, a kind of beans) of the place is known for its softness and agreeable taste. Variav was formerly a very important village of the old Baroda State. Its civic affairs were run by a municipality till 1951, when the municipality was converted into a panchayat. It has a small water-works constructed entirely at his own cost by one Shri Suleman K. Madha, a businessman in Rangoon. Variav has now lost its former glory because many of its important citizens have settled in Burma and other overseas countries. Its origin is traced to the times of *Rashtrakutas*. During those times, it seems to have been fairly big city and the main centre of a Mahal comprising of 108 villages in Konkan district. There is evidence to show that it was a port too during those days. Many ancient images and vessels reflecting Roman art have been excavated

from this village. Evidence is also available which indicates that this village existed during the fourth century.

MAHUWA

Mahuwa (21° 00', N; 73° 05' E; p. 2,133), the head quarters of the Mahuwa taluka, is a small village on the river Purna. It is about nine miles from Bardoli. which is the nearest railway station for it on the Tapi Valley Railway. Mahuwa, formerly a part of Baroda State, is known for its 'Vighneshwar Mahadeo' temple. The village has become a place of pilgrimage for the followers of various religious sects on account of this temple. The idol is made of rough black stone and has a seven hooded snake. The management of the temple vests in hands of Jains who worship the image as their own God. Hindus too worship the image as their own. Parsis also have faith in this temple. The idol magnificent in outlook, depicts the pose of a person sitting with his legs crossed horizontally and is of the size of a man. The idol is in the cellar of the temple, which appears like an ordinary house. There are in this temple, many other images of ancient times and manuscripts.

SAYAN

Sayan (T. Olpad, 21° 15' N, 72° 50' E ; p. 2,630) which is a railway station, north of Surat, on the main line of the western Railway is an important cotton growing centre and has ginning and pressing factories. It has a primary as well as a High School. There is also a village Panchayat which looks after the local affairs of the village.

SARAS

Saras (T. Olpad. 21° 15' N; 72°, 40° E ; p. 1,334). 11 miles north-west of Surat city has a famous temple of 'Sidharth Mahadev' in whose honour a fair is held every year on the 11th day of the Hindus month of 'Magsar'.

DUMAS

Dumas (T. Chorasi, 21° 05' N. 72° 40' E; p. 3.540), 12 miles south-east of Surat city is a sea-side health resort. Nearby is the Arabian Sea and the place known as 'Sangam' where the river Tapi enters the sea. It is connected with the asphalt road. It was well developed by the Nabab of Sachin State before the merger of the Sachin State in 1949. People from far and wide visit this place in summer. There are numerous bungalows and a senitorium which can be available to the visitors. The village is now well protected from the on sloughts of sea-waves by a wall recently constructed by the Bombay Government. It has a primary school and a village panchayat. There is also a District Local Board dispensary and a maternity ward attached to it. The town is served by S. T. Buses plying from the fort area of Surat city. The village is known for its alfanso mangoes, *chikus*, and *falsas*.

BHIMPOR

Bhimpor (T.Chorasi, 20° 25' N, 72° 50' E; p. 3,190) Bhimpor east of Dumas is connected with Dumas by a tiny village Sultansbad. It is situated on the creek of the Arabian Sea where the river Mindhola pours its water into it. Most of the in-

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habitants are *kolis* and *machhis* (*fisherman*) who have earned a name in the country as sailors and workers in various capacities in steamers. It is in this village that the first *Gandhighar* of Gujarat was built. Recently a wall has been built by the Government to protect this village from being inundated by sea water. Till the merger of the Sachin State, Bhimpor and Sultanabad were under the sovereignty of the Babas of Sachin State, who spared no pains to make them ideal health resorts by providing all possible amenities. The Nabab has his fine palace there and persons from Bombay, Surat, Rander, have their own bungalows in this village. Besides, there are three sanatoriums meant for Hindus, Parsis and Muslims.

Bhimpor, Sultanabad and Dumas are so connected with each other that they often form one unit. An asphalt road of about 12 miles joins these villages with Surat city. Beautiful mango groves, palm and chhini trees enhance the scenery of these places and make them pleasant to the eyes.

There is a place known as 'chawpaty' where visitors in the summer meet together in the evening and enjoy cool and refreshing sea breeze. By the side of the chawpaty and very near the palace of the Nabab, there is a place known as 'langar'. (i. e. anchor) erected in commemoration of those who laid their lives in the first world war. A well, which is famous for its wholesome water and serving all the three villages stands by its side. There is a temple of 'Hanuman' which is mostly visited by the Adivasi people of Surat district on Saturdays of the Hindu months of 'Ashadh' and 'Shravan' every year.

A primary school and a High School were started in 1958. Bhimpor and Sultanabad have their village Panchayats also. Facilities such as post and telegraph office and telephone are also available. The village Panchayats are now trying to have electric power from the Grid, which if becomes successful will add further to the grandeur of these health resorts.

HAJIRA

Hajira (T. Chorasi) is a village in Chorasi Taluka to the south-west of Surat city. A metalled road now joins this village with Surat. It is situated on the creek of the Arabian sea and has a light-house. Nearby is the Vaux's tomb from which the village got its name Hajira. i. e. Tomb. Vaux's tomb is on the right bank of the Tapi, near the mouth of the river, is a useful landmark for vessels sailing up the Tapi to Surat. The dome, about 30 ft. high, built in the Mohammedan style, is that of the tomb of an officer named Vaux in the East India Company's service till 1695, who rose from the position of a book-keeper to that of Deputy Governor of Bombay. In 1695 he was suspended from the company's service on account of suspected traitorous relations with the French. In 1697 he and his wife were enjoying a sail on the

Tapi, the boat was upset, and both of them were drowned. Close to this tomb is an old temple of Sikotra Mata. A light-house stands near the tomb.

It is a well known place of Health resort and there are sanitoriums for Parsis and Hindus. There are two wells water of which contains more iron and sulphur which impart digestive properties to the well water.

KATARGAM

Katargam (T. Chorasi, 21°, 10′ N; 72° 50′ E; p. 7,000), north-west of Surat city is 2 miles away from the Surat railway station. It is on the river Tapi and its lands are very fertile. Formerly it was known as *kantargm* because there existed a big forest here. It is well-known for its vegetables. *Papadi* one of the vegetables grown here is well-known for its softness and agreeable taste. There is a temple of 'Kantleshwar Mahadev' and a 'kund' (a small tank in the temple area) where fairs on Mondays of 'Shravan' month are held. People from the surrounding villages upto Broach and Bulsar visit this place for the darshan of this diety. Jains have also their artistic temples which they especially visit in 'Baryastan'. There are primary schools separately for boys and girls. An institute for orphans and a Remand Home are also established here. The local administration is run by the village panchayat. Being on the out-skirt forest city, post and telephone services are also available. Due to the proximity of the river Tapi, its climate is agreeable throughout the year. There is a senitorium in this village. Historical evidence indicated its existence since the olden time.

ASHVANIKUMAR

Ashvanikumar (T. Chorasi, 21° 10° N; 72° 50′: p. 1,909), in east of Katargam and nearly about two miles from the Surat Railway Station, is situated on the bank of the river Tapi. It is said that Ashvanikumar, the God's physicians were cremated here and hence it is named after them. The place where Ashvanikumars were said to have been cremated is known as 'Kumari Dharti' *i. e.* virgin land, and people even from distant places that they should be cremated there. Hindus from far and wise visit this place to pay their respects. There are many *pacca ghats* on the river Tapti of which is known as '*Pandav Ghat*' while the other is known as '*Gupheshvar Ghat*' named after the God *Gupheshvar*. A banyan tree with only three leaves is an object of curiosity there. On the full moon day of Kartika and Chaitra, fairs are held. It is also a cremation *ghat* for Surat city.

UTRAN

Utran (T. Chorasi, 21° 10′: 72° 50′E ; p. 1.272), situated on the north bank of the river Tapi Utran is three miles north of Surat city. The Bombay Electricity Board has laid one of its plants here to supply electricity to the area from Baroda to Bulsar.

JAHANGIR PURA

Jahangirpura (T. Chorasi, 23° 00′ N; 72° 35′ E; P. 245). Jahangirpura is situated at a distance of 5 miles west of Surat

CHAPTER 20.

Places of Interest.

city. It is on the river Tapi and nearby is a *pucca ghat* known as '*Kurukshetra ghat*' which is a place of pilgrimage. The first co-operative ginning and pressing factory in Surat district was established here. There is also an Ashram known as 'Hari Aum Ashram' established in memory of Swami Haree Chunilal Bhavsar known as 'Moha' by his devotees.

UDHNA.

Udhna (T. Chorasi, P. 2,594) Udhna, south of Surat city is a railway station on the main line of the Western Railway. It is from this station that the Tapi Valley Railway is bifurcated from the main line of the western Railways. It has become a centre of 'small scale industries' which is now better renown as 'Udyog Sagar'. It has a low-shed and a vast railway-yard. There is also the temple of 'Bhid Bhanjan Mahadev' where fairs are held on Mondays of 'Shravan' month.

NANA VARACHHA

Nana Varachha (T. Chorasi, 21° 10′ N; 72° 50′ E; p. 1,460) Nana Varachha is situated at about three miles east of Surat city. It is here that the Surat municipality has bored wells and created its water works to supply water to Surat City and Rander. It is on the south bank of the river Tapi, and its lands are very fertile. It has two Ashrams, one established by the devotees of Swami Shri Hansdevji and the other known as 'Tapi Brahmacharya Ashram' founded by Swami Shree Atmanand Saraswati.

MORA.

Mora (T. Chorasi, 21° 10′ N; 72° 15′ E ; p. 614). Mora is 14 miles south of Surat city. There is a well which is said to have been constructed by the King Mayurdhvaj. People from far and near visit this place for performing 'shradh' when any women dies in labour. It is a place of pilgrimage and a fair known as Mora's yatra is held there on the 14th day of the dark half of the Hindu month of *Magsar*.

ATHVA.

Athva (T. Chorasi, 21° 10′ N; 72° 45′ E; p. 3,297), situated on the outskirt of Surat city Athva is just like its suburb. In this village there is an Agriculture Farm which conducts research on cotton and other plants. There is also a Hindu Gurukul' which imparts teaching on Hindu Religion along with the Secondary education. Nearby are the temples of 'Somnath' and 'Bhimnath' Mahadevs which are often visited by the people of the surrounding villages mostly on Mondays.

ORNA.

Orna (T. Kamrej, 21° 15′ N; 73 00′ E; p. 1,459). Orna situated at about 9 miles north of Bardoli, a railway station on the Tapi Valley Railway. Nearby is a temple of Gadteshvar on the bank of the river Tapi. It is said that 'Naradji' practiced penance there. A fair is held when Jupiter enters the constellation of the Lion, an event which occurs every year. It has a High School, a District Local Board Dispensary and a Village Panchayat.

KADOD

Kadod (T. Bardoli, 21° 10′ N; 73° 10′ E; p. 7,202) situated on the south bank of the river Tapi, Kadod is a big centre of

timber production. The 51st session of the Congress under the presidentship of Shri Subhas Bose was held in the nearby village of Haripura. The earthen statue of Shri Vithalbhai Patel erected in the Congress Pandal is removed from there and still preserved in Kadod. It has a primary school, a high school and a village panchayat.

KAKADAPAR.

Kakadapar (T. Mandvi, 20° 20′ N; 73° 30′ E ; p. 1,000). Kakadapar is 16 miles away from Mandvi, a railway station on the Tapi Valley Railway. A big dam has been constructed here to divert the Tapi river water to irrigate most of the area of Surat District. The canal constructed for irrigation purposes is about 800 miles in length.

GHANTOLI.

Ghantoli (T. Mandvi, 21° 15′ N; 73° 15′ E; p. 1,445). Ghantoli is 17 miles away from Mandvi, a railway station on the Tapi Valley Railway. The people of the surrounding areas are mostly backward. The Ashram under the Sarvodaya Scheme is being run for economic, social and cultural uplift of the villagers.

ARETH.

Areth (T. Mandvi, 21° 15′ N; 73° 05′ E; p. 1,077). Areth is situated at a distance of 17 miles from Kim a railway station on the main line of the western railway. The area covered by this village abounds in black trap metal which is, useful in constructing pacca (metalled) roads.

TADKESHVAR

Tadkeshvar (T. Mandvi, 21° 20′ N; 73° 00′ E; p. 3,954). Tadkeshwar 9 miles from Kim, a railway station, north of Surat is situated in the area known as Tadka Van and hence named after it. White earth which is found here in great abundance is more used for washing clothes. There is a District Local Board dispensary and a maternity house attached to it. A water-works constructed out of the munificent donation from one of its illustrious residents serves the villages with good potable water. It has also a high school which has become very useful to the people of the surrounding villages.

KARADI

Karadi (T. Navsari, p. 1,781), Karadi is at a distance of 8 miles from Navsari town. It is ,connected with Navsari by a good metalled road. State trans- port buses ply over this road throughout the day. People of this village had played an important part in the national struggle for Independence in 1942. It is also a centre of Khadi production. It has a khadi vidyalaya and a primary school. Its civic affairs are looked after by a village panchayat.

DANDI

Dandi (T. Navsari, 20° 50′ N; 72° 45′ E; p. 771). Situated on the coast line and well known as a salt centre, this place has acquired a name in the history after the famous Dandi Mauha Salt Satyagrah launched by Gandhiji in March, 1930. Nearby there is a place known as 'Bibi Ajani'. It is said that the Pir,

named Sayed Murad Nur Mahomed, had married a Rajput princess. Once a quarrel arose between them whereupon he took her to sea and threw her into it near 'Bibi Ajani'. A prayer is still held there in her honour and especially *Lotias* pay visit to it.

UMRAT

Umrat (T. Navsari, 20° 55′ N; 72° 45′ E; p. 2,988). Umrat the sea-side health resort of the former Gaekwars of Baroda, is ten miles west of Maroli, railway station on the main line of the western railway. It has a fine Bungalow erected by the Gaekwars which is now used as a rest house. There are numerous rooms surrounding this bungalow which are now available to persons visiting this place in summer. The State Government now trying to make it an ideal health resort for middle class people by starting 'Holiday Camp'. Near Umrat the Baroda State has also provided ground for aeroplanes to encamp. It has a primary school and a village panchayat.

DHARAGIRI

Dharagiri (T. Navsari, 23° 15′ N;). Dharagiri two miles east of Navsari is situated on the river Poorna. Ancient ralics found here indicate that it was a town in ancient days. A bridge is constructed on the Bombay-Delhi Road to cross the river Poorna.

MAJIGAM

Majigam (T. Chikhali, 22° 10′ N; 73° 50′ E; p. 1,297). Situated at a distance of 5 miles east of Billimora Majigam has an old temple of 'Malika Arjun', the dome of which is decorated with the coloured pictures of 'Dasha-Avtars' i. e. ten incernations of god. A fair is held there on 'Kali Chaudas' i. e. the 14th of the darker half of the Hindu month of Aswin.

FADVEL

Fadvel (T. Chikhai, p. 1,825). Fadvel is situated at about six miles from Rankava, a station on the Bilimora Kala-Ambay railway that starts from Billimora. It clusters of Kevda trees which grow in abundance there. In a nearby place known as 'Samaradev', a weekly bazar is held on every Friday. Here are lying two carved stones which are said to belong to the Maratha Age.

DHARASANA

Dharasana (T. Bulsar, 23° 15′ N; 72° 50′ E; p. 1,825). Dharasana is two miles west of Dungri which is a railway station on the main line of Western Railway. It is well-known for its salt-pans and was one of the centres where salt raids on Agars took place in 1930.

TITHAL

Tithal (T. Bulsar, 20°, 35′ N; 72° 50′ E; p. 1,075). Tithal is a sea-side health resort 4 miles west of Bulsar. Being on sea-shore, the climate is agreeable throughout the year. People of means from Bombay to Ahmedabad visit this place mostly in summar. There is no Dharmashala but only one 'Tata bag' which is available to the employees of Tata concerns without any distinction of caste or creed. Rich Hindus and Parsis

have built their bungalows there which can be available on rent. The State Government is taking steps to develop this health resort by starting holiday camps in summer and hence it has become very popular. Now even a man of modest means can take advantage of this place.

UDVADA

Udvada (T. Pardi, 20° 25′ N; 72° 50′; p. 3,956). Situated on sea-shore, Udvada is a railway station on the main line of Western Railway. It is 111 miles north of Bombay. The village is mostly inhabited by the Parsis and it is their holy place of pilgrimage. It is said that the sacred fire from Navsari Atash-behram (Fire Temple) was secretly carried by some priests to Udvada, a place thirty four miles south of Navsari in 1742 owing to some disputes among them and consequently Udvada is held in good respect by the Parsis. During Papeti Holidays and on other auspicious days, Parsis even from distant places visit this place. There is a well-equipped Dharmashala for Parsis and also a charitable dispensary. It is a good centre for grass and black trap metal.

SUPPLEMENT

PHYSICAL FEATURES AND NATURAL RESOURCES

TABLE No. 1

Statement showing total population including total number of literate persons in the district according to 1961 Census.

(provisional).

Total population	Males	Females
24,38,740	12,26,107	12,12,633

Literate Persons.		
Total Literate Persons	Males	Females.
8,33,406	5,39,385	2,94,021

AGRICULTURE

Progress under Second Five Year Plan :—

Considerable attention was paid during the second plan period for the development of agriculture in the district. Schemes relating to agricultural research and training, improved agricultural practices, supply of improved seeds and fertilizers, reclamation of khar and khajan lands and Soil conservation helped to a great extent in agricultural development.

As a part of the research programme, four agricultural research stations were opened during the second plan period. Seed multiplication farms were started in most of the talukas in order to provide improved agricultural seeds to the agriculturists. Japanese method of paddy cultivation was introduced on a wider scale which brought about 25,000 acres of land under this method during 1958-59. Five schemes for reclamation of khar lands which were introduced during the first plan period reclaimed an area of 2,740 acres in the district during the second plan. Five more schemes were implemented, two each in Navsari and Olpad talukas and one in Bulsar taluka, in order to reclaim about 13,000 acres of khar lands.

A net area of 16,75,236 acres was cultivated during 1958-59 as against 16,66,090 in 1957-58 and 16,73,700 in 1956-57.

TABLE No. 1*

Statement showing distribution of irrigated areas by crops in the district in 1958-59.

Crops	Area under irrigation. (Acres)
Rice	10,553
Wheat	2,688
Jowar	35
Sugarcane	5,376
Other Food crops	—
Cotton	2,711
Tobacco	41
Chillies	1,139
Fodder Crops	895
Other non-food crops	—
Total	39,963

TABLE No. 2

Statement showing area in acres under Sugarcane in the district in 1958-59.

No.	Name of Taluka	Sugarcane	Other Sugars	Total
1.	Bansda	57	—	57
2.	Bardoli	583	—	583
3.	Bulsar	249	—	249
4.	Chikhali	332	—	332
5.	Chorasi	467	—	467
6.	Dharampur	150	—	150
7.	Gandevi	797	2	799
8.	Kamrej	440	—	440
9.	Mahuva	256	—	256
10.	Mandvi	79	—	79
11.	Mangrol	—	—	—
12.	Navsari	241	11	252
13.	Olpad	24	—	24
14.	Palsana	349	—	349
15.	Pardi	837	—	837
16.	Songadh	27	—	27
17.	Valod	145	—	145
18.	Vyara	293	—	293
	Total ...	5,326	13	5,339

*Figures given in Tables 1 to 13 are provisional.

TABLE No. 3

Statement showing area in acres under Condiments and Spices in the district in 1958-59.

No.	Name of Taluka	Condiments and Spices
1.	Bansda	25
2.	Bardoli	76
3.	Bulsar	373
4.	Chikhali	179
5.	Chorasi	852
6.	Dharampur	14
7.	Gandevi	495
8.	Kamrej	194
9.	Mahuva	64
10.	Mandvi	98
11.	Mangrol	87
12.	Navsari	430
13.	Olpad	455
14.	Pardi	137
15.	Palsana	484
16.	Songadh	32
17.	Valod	116
18.	Vyara	70
	Total	4,182

TABLE No. 4

Statement showing area in acres under irrigation in the district in 1958-59.

No.	Name of Taluka	Area under irrigation
1.	Bansda	143
2.	Bardoli	3,676
3.	Bulsar	1,059
4.	Chikhali	989
5.	Chorasi	7,263
6.	Dharampur	304
7.	Gandevi	5,095
8.	Kamrej	3,734
9.	Mahuva	661
10.	Mandvi	385
11.	Mangrol	310
12.	Navsari	2,979
13.	Olpad	2,436
14.	Palsana	3,902
15.	Pardi	3,256
16.	Songadh	154
17.	Valod	415
18.	Vyara	3,192
	Total	39,964

TABLE No. 5

Statement showing area in acres under Oilseeds in the district in 1958-59.

No.	Name of Taluka	Edible Oilseeds				Total Edible Oilseeds	Non-edible Oilseeds		
		Ground-nut	Coconut	Sesamum	Mustard		Castor	Linseed	Total non-edible Oilseeds
1.	Bansda	1,463	—	—	—	1,463	25	—	25
2.	Bardoli	936	—	14	—	950	402	—	402
3.	Bulsar	—	—	1	—	1	202	—	202
4.	Chikhali	605	—	72	—	677	408	—	408
5.	Chorasi	1,657	—	31	—	1,688	68	—	68
6.	Dharampur	—	—	—	—	—	68	—	68
7.	Gandevi	97	—	7	—	104	340	—	340
8.	Kamrej	3,176	—	70	2	3,148	149	—	149
9.	Mahuwa	2,344	—	—	—	2,344	271	—	271
10.	Mandvi	5,651	—	71	—	5,722	429	—	429
11.	Mangrol	7,858	—	289	—	8,147	1,473	—	1,473
12.	Navsari	1,262	—	51	—	1,313	947	—	947
13.	Olpad	3,358	—	144	14	3,416	7	—	7
14.	Palsana	2	—	20	—	22	388	—	388
15.	Pardi	1,699	9	38	—	1,746	151	—	151
16.	Songadh	3,282	—	120	—	3,402	1,173	—	1,173
17.	Valod	1,645	—	24	—	1,669	280	—	280
18.	Vyara	9,451	—	217	—	9,668	507	—	507
	Total	44,478	9	1,159	16	45,662	7,288	—	7,288

TABLE No. 6

Statement showing area in acres under irrigation by sources in the district in 1958-59.

No.	Name of Taluka.	Government Canals.	Tanks	Wells	Gross area irrigated.
1.	Bansda	—	17	126	143
2.	Bardoli	510	1,557	1,609	3,676
3.	Bulsar	—	—	1,059	1,059
4.	Chikhali ...	—	—	989	989
5.	Chorasi ...	817	608	5,338	7,263
6.	Dharampur ...	—	95	209	304
7.	Gandevi	496	674	3,042	5,095
8.	Kamrej	1,706	—	2,028	3,734
9.	Mahuva ..	157	—	504	661
10.	Mandvi	—	—	385	385
11.	Mangrol ...	—	—	310	310
12.	Navsari	—	903	2,076	2,979
13.	Olpad	—	2,164	272	2,436
14.	Palsana	937	416	2,550	3,902
15.	Pardi	—	2,381	875	3,256
16.	Songadh ...	55	—	99	154
17.	Valod	—	—	415	415
18.	Vyara	2,885	48	259	3,192
	Total ...	7,563	8,862	23,245	39,953

TABLE No. 7

Statement showing details of cultivated and uncultivated areas in the district in 1958-59.

No.	Name of Taluka	Gross cropped area	Area cropped more than once	Net area sown	current fallows	Total cultivated area	Forests	Culti-vable waste	Others	Total unculti-vated area
1.	Bansda	78,329	4,257	74,072	7,725	81,797	57,177	86	16,324	73,587
2.	Bardoli	89,230	9,262	79,968	—	,96876	—	47	13,651	13,698
3.	Bulsar	1,06,703	14,258	92,445	—	29445	2,385	5,985	25,107	33,477
4.	Chikhali	1,36,733	14,352	1,22,381	—	1,22,281	1,199	244	19,784	21,227
5.	Chorasi	94,184	0,872	93,312	—	93,312	2,128	297	45,748	48,173
6.	Dharampur	1,42,018	11,122	1,30,896	—	1,30,896	73,578	1,32,905	71,122	2,77,605
7.	Gandevi	49,904	6,039	43,865	—	43,865	463	188	25,651	26,302
8.	Kamrej	81,932	2,758	79,174	863	80,037	—	—	13,790	13,790
9.	Mahuva	1,74,616	5,985	68,632	—	68,632	6,370	15	12,529	18,914
10.	Mandvi	1,15,060	6,128	1,08,932	—	1,08,932	42,164	3,072	24,723	69,959
11.	Mangrol	1,49,638	1,044	1,48,594	—	1,48,594	14,504	—	28,762	43,266
12.	Navsari	1,23,757	10,223	1,13,534	—	1,13,534	17,393	292	50,556	68,241
13.	Olpad	1,11,997	880	1,11,117	—	1,11,117	—	160	58,496	58,656
14.	Palsana	46,682	2,366	44,316	—	44,316	—	—	5,323	5,323
15.	Pardi	1,02,184	12,847	89,337	—	89,337	891	—	14,867	15,758
16.	Songadh	1,14,579	3,729	1,10,850	—	1,10,850	50,859	2,474	30,515	83,848
17.	Valod	50,498	6,896	43,602	—	43,602	458	42	5,881	6,381
18.	Vyara	1,30,831	9,649	1,21,182	—	1,21,182	54,950	123	24,485	79,558
	Total ...	17,98,875	1,23,639	16,75,236	8,588	16,83,824	3,24,519	1,45,930	4,87,314	9,57,763

TABLE No. 8

Statement showing distribution of cropped area in acres in the district during 1958-59.

No.	Name of Talukas	Food Crops Total	Food Crops Non-irrigated	Food Crops Irrigated	Non-food Crops Total	Non-food Crops Non-irrigated	Non-food Crops Irrigated	All crops Total	All crops Non-irrigated	All crops Irrigated.
1.	Bansda	51,887	51,747	140	26,442	26,439	3	78,329	78,186	143
2.	Bardoli	34,441	32,419	2,022	54,789	54,135	654	89,230	86,554	2,676
3.	Bulsar	47,780	46,724	1,056	58,923	58,920	3	1,06,703	1,05,644	1,059
4.	Chikhali	62,098	61,111	987	74,635	74,633	12	1,36,733	1,35,744	989
5.	Chorasi	38,329	31,990	6,339	55,855	54,931	924	94,184	86,921	7,263
6.	Dharampur...	96,027	95,723	304	45,991	45,984	7	1,42,018	1,41,707	311
7.	Gandevi	24,250	19,212	5,038	26,654	26,597	57	50,904	45,809	5,095
8.	Kamrej	23,998	20,628	3,370	57,934	57,570	364	81,932	78,198	3,734
9.	Mahuva	29,776	29,212	564	44,840	44,743	97	74,616	73,955	661
10.	Mandvi	58,142	57,757	385	56,918	56,918	—	11,060	1,14,675	385
11.	Mangrol	58,353	58,065	288	91,285	91,263	22	1,49,638	1,49,328	310
12.	Navsari	44,373	41,475	2,898	78,384	78,303	81	1,22,757	1,19,778	2,979
13.	Olpad	37,316	35,023	2,293	74,681	74,538	143	1,11,997	1,09,561	2,436
14.	Pardi	52,798	49,550	3,248	49,386	49,378	8	1,02,184	98,928	3,256
15.	Palsana	16,505	12,803	3,702	30,177	29,977	200	46,682	42,780	33,902
16.	Songadh	79,575	79,421	154	35,004	35,004	—	1,14,579	1,14,425	154
17.	Valod	24,509	24,096	413	25,989	25,987	2	50,498	50,083	415
18.	Vyara	73,928	71,986	1,942	56,903	55,653	1,250	1,30,831	1,27,639	3,192
	Total ...	8,54,085	8,19,942	36,143	9,44,789	9,40,942	3,817	17,98,865	17,58,905	39,960

TABLE No. 9

Statement showing area in acres under Fruits and Vegetables in the district in 1958-59.

No.	Name of Taluka	Fruits & Vegetables
1.	Bansda	140
2.	Bardoli	938
3.	Bulsar	7,970
4.	Chikhali.	3,385
5.	Chorasi	6,047
6.	Dharampur	520
7.	Gandevi	4,004
8.	Kamrej	2,084
9.	Mahuva	443
10.	Mandvi	315
11.	Mangrol	421
12.	Navsari	2,222
13.	Olpad	622
14.	Pardi	5,481
15.	Palsana	1,822
16.	Songadh	60
17.	Valod	110
18.	Vyara	224
	Total	36,808

TABLE No. 10

Statement showing area in acres under Cereals in each taluka of the district in the year 1958-59.

No.	Name of Taluka	Rice	Wheat	Kharif Jowar	Rabi Jowar	Total Jowar	Bajari	Maize	Ragi	Kodra	Other cereals	Total cereals
1.	Bansda ...	23,643	23	5,524	—	5,524	—	1	8,984	1,602	596	40,373
2.	Bardoli ...	10,788	924	10,699	124	10,823	1	—	—	3	31	22,565
3.	Bulsar ...	22,700	84	457	—	457	—	—	1,351	1,002	—	25,594
4.	Chikhali ...	31,397	426	6,015	—	6,015	—	—	3,347	1,832	101	43,118
5.	Chorasi ...	1,712	1,199	21,000	335	21,335	2,129	—	—	—	—	26,375
6.	Dharampur ...	34,690	24	106	—	106	—	—	32,549	2,634	5,584	75,587
7.	Gandevi ...	10,028	186	3,103	—	3,103	—	—	25	18	—	13,360
8.	Kamrej ...	3,578	739	12,909	246	13,155	—	—	—	—	—	17,472
9.	Mahuva ...	9,361	308	11,997	—	11,997	—	—	192	28	—	21,886
10.	Mandvi ...	14,756	1,019	20,831	5,009	25,840	10	211	1,325	2,375	273	48,809
11.	Mangrol ...	12,649	1,844	18,160	12,011	30,171	75	230	1,301	4,116	1,422	51,791
12.	Navsari ...	13,643	417	16,777	—	16,777	4	—	13	13	44	30,911
13.	Olpad ...	1,775	5,438	20,282	2,829	23,111	2,179	—	—	—	—	32,503
14.	Pardi ...	29,288	110	2	—	2	—	—	1,597	2,029	—	33,028
15.	Palsana ...	2,604	234	7,033	—	7,033	—	—	—	—	—	9,871
16.	Songadh ...	2,437	1,160	9,205	6,042	15,247	—	—	6,934	9,261	4,494	61,470
17.	Valod ...	7,767	294	8,476	64	8,540	—	—	—	40	108	16,747
18.	Vyara ...	25,867	753	17,921	2,538	20,459	—	—	—	1,862	6,234	55,175
	Total ...	8,80,615	15,182	1,90,497	29,198	2,19,695	4,378	425	57,618	26,815	18,887	6,23,635

TABLE No. 11

Statement showing area in acres under Pulses in the district in the year 1958-59.

No.	Name of Taluka	Gram	Val	Tur	Mag	Moath	Adad.	Other pulses	Total pulses
1.	Bansda	675	3,074	3,972	349	—	2,905	317	11,292
2.	Bardoli	43	8,282	1,491	101	2	283	78	10,279
3.	Bulsar	141	12,360	323	31	—	678	61	13,594
4.	Chikhali	1,002	11,001	1,345	123	—	1,043	570	15,084
5.	Chorasi	169	1,492	2,269	274	—	89	295	4,588
6.	Dharampur...	356	1,448	8,266	11	—	9,484	191	19,756
7.	Gandevi	194	4,676	437	90	—	95	100	5,592
8.	Kamrej	37	2,261	1,111	203	19	125	52	3,808
9.	Mahuva	212	4,842	931	235	—	705	202	7,127
10.	Mandvi	934	5,320	2,635	511	19	1,558	864	11,841
11.	Magrol	552	369	3,850	347	20	702	214	6,054
12.	Navsari	172	7,728	1,337	692	4	365	268	10,557
13.	Olpad	564	412	1,986	489	72	54	135	3,712
14.	Pardi	325	11,095	922	70	—	1,154	234	13,803
15.	Palsana	97	1,792	1,249	159	29	134	31	3,491
16.	Songadh	2,303	1,953	7,627	108	—	5,310	685	17,986
17.	Valod	172	5,608	583	46	5	824	153	7,391
18.	Vyara	1,283	6,368	5,154	564	186	3,574	1,037	18,166
	Total ...	9,234	90,081	45,477	4,403	356	29,073	5,487	1,84,121

TABLE No. 12

Statement showing area in acres under various crops in the district in 1958-59.

CROPS	
Cereals	
Rice	2,80,615
Wheat	15,182
Jowar	2,19,695
Bajari	4,398
Ragi	57,618
Kodra	26,815
Other Cereals	18,887
Total Cereals	5,74,010
Pulses	
Tur	45,477
Gram	9,234
Val	90,081
Mag	4,403
Math	26,014
Adad	29,073
Other Pulses	5,487
Total Pulses	1,84,121
Oilseeds	
Sesamum	1,159
Castor seeds	7,288
Lin seeds	—
Coconut	9
Mustard	16
Total Oilseeds	8,472
Fibres	
Cotton	4,34,268
Other fibres	3,211
Total Fibre	4,37,479
Sugars	
Sugar cane	5,326
Other sugars	13
Total Sugars	5,339
Drugs and Narcotics	382
Condiments and Spices	2,345
Fruits and Vegetables	36,808
Fodders	4,45,662

TABLE No. 13

Quinquennial statement of agricultural holdings in Surat District (Taluka wise) for the year 1960

Name of Taluka	ACRE GROUPS						
	Upto 5 acres	Over 5 and upto 15 acres	Over 15 and upto 25 acres	Over 25 and upto 100 acres	Over 100 and upto 500 acres	Over 500 acres	Total for all groups
(1) BANSDA							
No. of Holders	12,424	2,445	977	588	19	1	14,624
Area held in acres—							
Khalsa	20,272-10	20,632- 7	15,642- 8	14,440- 4	2,845- 2	1,424- 4	75,255-35
Inam	—	48.38	—	—	—	—	48.38
(2) SONGADH							
No. of Holders	4,110	3,138	855	841	7	2	8,953
Area held in acres—							
Khalsa	16,781-05	31,385-00	17,175-00	50,288-21	1,412-02	1,273-33	1,18,315-21
Inam	—	—	—	—	—	—	—
(3) MAHUVA							
No. of Holders	3,070	4,247	1,741	140	—	—	9,198
Area held in acres—							
Khalsa	9,210-17	29,729-25	29,597-13	4,480-15	—	—	73,017-30
Inam	72.37	43.24	24.09	—	—	—	140.30

(4) VALOD							
No. of Holders	5,002	2,318	361	122	—	—	7,803
Area held in acres—							
Khalsa	11,659-09	17,223-18	7,918-63	4,541-13	—	—	41,343-23
Inam	16.26	14.55	—	—	—	—	30.81
(5) CHIKHALI							
No. of Holders	7,795	1,584	986	419	4	—	10,788
Area held in acres—							
Khalsa	18,765-04	8,906-08	14,055-36	11,825-26	854-06	—	54,407-00
Inam	46.24	—	—	—	—	—	46.24
(6) VYARA							
No. of Holders	9,300	3,806	1,132	770	97	—	15,165
Area held in acres—							
Khalsa	40,268-16	20,344-25	19,757- 4	30,300-30	12,977-02	—	1,23,647-37
Inam	68.6	18.24	—	—	—	—	86.30
(7) MANGROL							
No. of Holders	3,462	3,397	1,091	823	22	—	8,795
Area held in acres—							
Khalsa	6,924-00	23,779-00	21,820-00	24,690-00	2,326-00	—	79,539-00
Inam	—	—	—	—	—	—	—

TABLE No. 13 (Contd.)

Name of Taluka	ACRE GROUPS						
	Upto 5 acres	Over 5 and upto 15 acres	Over 15 and upto 25 acres	Over 25 and upto 100 acres	Over 100 and upto 500 acres	Over 500 acres	Total for all groups
(8) BARDOLI							
No. of Holders	5,449	2,616	985	314	—	—	9,364
Area held in acres—							
Khalsa	23,468-00	31,756-00	17,191-00	8,408-00	—	—	80,823-00
Inam	38 00	582.00	—	—	—	—	620.00
(9) GANDEVI							
No. of Holders	11,869	2,070	441	118	1	—	14,499
Area held in acres—							
Khalsa	17,394-20	14,262-05	7,380-10	3,926-03	156-16	—	43,119-14
Inam	515.26	213.09	97.00	27.00	—	—	852.35
(10) DHARAMPUR							
No. of Holders	5,256	5,221	1,722	924	46	2	13,171
Area held in acres—							
Khalsa	17,104-22	36,428-20	30,717-31	31,960-37	5,530-14	1315-29	1,23,057-33
Inam	270 15	586.02	155.28	71.02	—	—	1,083.07

(11) PALSANA							
No. of Holders	1,852	1,937	942	209	—	—	4,940
Area held in acres—							
Khalsa	8,781-00	13,907-00	15,772-00	6,270-00	—	—	44,730-00
Inam	110.00	352.00	—	—	—	—	462.00
(12) OLPAD							
No. of Holders	8,025	3,802	1,404	552	—	—	13,783
Area held in acres—							
Khalsa	24,232-18	29,523-23	23,577-38	8,345-17	—	—	85,679-16
Inam	474.33	301.74	206.13	22.13	—	—	1,006.13
(13) MANDVI							
No. of Holders	8,252	5,681	1,214	356	6	—	15,509
Area held in acres—							
Khalsa	37,086-20	27,756-03	22,638-00	11,680-00	1,318-00	—	1,00,478-23
Inam	—	34.25	15.35	822.39	477.21	—	1,351.00
(14) KAMREJ							
No. of Holders	3,741	3,410	1,021	330	9	2	8,513
Area held in acres—							
Khalsa	13,052-07	37,849-07	20,038-35	15,614-37	2,216-22	1,254-00	90,025-28
Inam	—	—	—	—	—	—	—

TABLE No. 13 (Contd)

Name of Taluka	ACRE GROUPS						
	Upto 5 acres	Over 5 and upto 15 acres	Over 15 and upto 25 acres	Over 25 and upto 100 acres	Over 100 and upto 500 acres	Over 500 acres	Total for all groups
(15) NAVSARI							
No. of Holders	21,823	5,220	1,311	302	10	—	28,666
Area held in acres							
Khalsa	32,882-33	40,899-31	28,587-17	10,245-27	1,289-00	—	1,13,904-28
Inam	1,211.17	753.13	39.32	68.30	—	—	2,073.12
(16) PARDI							
No. of Holders	9,290	1,755	289	187	7	—	11,528
Area held in acres—							
Khalsa	2,641-18	4,382-32	8,263-16	10,707-28	1,112-02	—	27,107-16
Inam	—	—	—	—	—	—	—
(17) CHORASI							
No. of Holders	8.618	3,607	870	334	6	—	13,435
Area held in acres—							
Khalsa	18,863-36	19,877-06	8,230-30	7,147-18	531-11	—	54,650-21
Inam	3,960.30	5,592.24	2,830.08	2,100.15	589.13	—	15,073.10

(18) BULSAR							
No. of Holders	14,178	2,902	676	356	1	—	18,113
Area held in acres—							
Khalsa	50,433-08	6,267-01	2,442-02	2,000-04	219-03	—	61,361-18
Inam	200 14	100.05	150.10	120.05	—	—	570.34

INDUSTRIES LARGE AND SMALL

Progress under Second Five Year Plan : It is the polic of both the Central and State Governments to develop industries. The main lines along which this devlopment is envisaged are organization of industrial co-operatives and training of artisans in the use of improved tools and equipment. During second five year plan it was proposed to organize 60 industrial co-operatives. These societies were to be given financial assistance by way of investment in share capital, subsidies towards manegerial expenses and loans and subsidies for purchasing tools and equipment. The total financial assistance proposed to be rendered to various industries was Rs. 4 lakhs. Besides Rs. 6.80 lakhs were to be given to various industries under the Satet Aid to Industries scheme during the second five year plan.

The following schemes received assistance during 1958-59. Tanning and Leather industry was given assistance by way of loan to the extent of Rs. 1,500 and by way of subsidy to the extent of Rs. 5,325. Financial assistance to the tune of Rs. 5,525, Rs. 43,000, Rs. 1,000 and Rs. 3,500 was supplied to Talachora Panchal Wood and Iron works, Backward class Societies, Forest Societies and Labour Contract Societies respetively. The state Government also supplied Rs. 6,001 to each of the five industrial co-operative societies from scheduled areas. In order to provide marketing facilities a motor van was placed at the disposal of the district.

FINANCE

Co-operative Societies

Agricultural Credit Societies : In 1958-59 there were 424 agricultural credit societies with a total membership of 76,155 individuals. The working capital of these societies amounted to Rs. 1,52,03,933. The loans advanced to members totalled Rs. 12,99,667 while loans repaid amounted to Rs. 15,48,378. The total loans outstanding were Rs. 89,32,339.

Agricultural Non-Credit Societies : In 1958-59 there were 144 societies. The working capital during this period was Rs. 1,92,06,660. The loans advanced to the members amounted to Rs. 1,11,44,652 while loans repaid totalled Rs. 1,94,06,831 and loans outstanding formed a total of Rs. 68,44,221.

Non-Agricultural Credit Societies : There were 88 non-agricultural credit societies with a membership of 32,267 individuals in the district in 1958-59. The working capital was Rs. 2,77,00,102 while loans advanced amounted to Rs. 1,92,87,391. Loans repaid were Rs. 1,17,01,233.

Non-Agricultural Non-Credit Societies : There were 414 non-agricultural non-credit societies with a total membership of 28,315 individuals in 1958-59. The total working capital of these societies was Rs. 1,32,31,658. Loans to the tune of Rs. 44,371, were advanced to members, Rs. 48,477 were recovered from members during this period while Rs. 5,29,070 remained as loans outstanding.

Primary Land Mortgage Bank : In 1957-58 the district had one primary land mortgage bank with a membership of 1460 individuals. The share capital was Rs. 2,03,000 while the working capital amounted to Rs. 6,32,000.

Progress under Second Five Year Plan

In the following pages an attempt is made to give a broad review of credit agencies coming within the purview of co-operation. Various credit agencies such as Joint Stock Banks, State Financial Corporation etc., have not been included as they fall outside the scope of the second five year plan.

The co-operative programme in the second five year plan was formulated in accordance with the recommendations of the All India Rural Credit Svrvey Committee's Survey Report (1954). The schemes under this

head primarily aim at development of co-operative credit for increasing agricultural production. In the district during the the second five year plan it was decided to establish 50 large sized multi-purpose societies either by fresh organization or by amalgamation of small sized units. Besides, 25 small sized societies were also to be set up in Dharampur taluka of this district. Cultivators of this district during the plan period were to receive financial assistance in the form of short-term loans, medium term loans and long term loans to the extent of Rs. 665 lakhs, 65 lakhs and 45 lakhs respectively.

In the year 1958-59 agricultural finance to the tune of Rs. 65,483 was advanced. During the same period 23 multipurpose societies were given subsidies for managerial expenses.

Development of Co-operative Marketing : The fundamental purpose of this scheme is to eliminate middlemen and malpractices in marketing of commodities. Till 1958-59, Rs. 2.05 lakhs were spent as capital expenditure, 23 godowns were constructed and 20 societies were given loans for construction activities.

Co-operative Lift Irrigation Societies: Rs. 4511 were disbursed as managerial subsidy and an amount of Rs. 10,000 was provided as loans.

Construction of Grain Depots : 10 multipurpose societies were given loans to the extent of Rs. 35,000 for constructing grain depots.

TRADE

In the district, Surat, Bilimora and Bulsar are the main ports; of them Surat is of historical importance as it was one of the major ports of Gujarat and Western India in the medieval period. With the development of Bombay as a major port and of railways its importence declined and now it is an intermediate port from where coastal trade is being transacted by the merchant community. The port is only 14 miles inland from Arabian sea and 145 miles north of Bombay. Commodities that enter into coastal trade are: building materials, cement, cocoanuts, food-grains, onions, salt, timber and general cargo.

Bilimora, a riverine port situated on the river Ambika, is roughly 12 miles inland from the Arabian sea, 30 miles south of Surat and about 125 miles north of Bombay. This port mainly exports timber obtained from the Dangs forest. Most of the timber is loaded in sailing vessels and taken to ports of Saurashtra.

Imports in Bilimora consist of general cargo and building materials, mostly for local consumption.

The port of Bulsar is located roughly 2 miles inland on the Auranga river. It is a minor port under the Ports Act, and famous for its export trade of timber and firewood.

The main commodities of imports and exports and their respective tonnages for the years 1958-59 and 1959-60 are shown below:-

SURAT

Imports			*Exports*		
Commodities	1958-59	1959-60	Commodities	1958-59	1959-60
Building Materials ...	1937	3084	Cotton seeds ...	1835	2947
Cement ...	1686	36	Food grains ...	19	31
Cocoanuts ...	975	927	Timber ...	711	914
Food grains ...	137	100	General Cargo ...	627	503
Onions ...	3947	4111			
Salt ...	46	40			
Timber ...	185	188			
General Cargo ...	1511	1906			
Total ...	10448	10392	Total ...	3338	4395

BILIMORA

Imports		*Exports*	
Commodity	1959-60	Commodity	1959-60
Building materials ...	1195	Timber	1590
Food grains	71	Food grains	363
Timber	395	Bamboo	190
Stones	3058	Mangoes.	635
Fish	216	Fire wood.	354
Onions	948	Straw Board	127
G. N. Oil	221	General Cargo.	439
General Cargo. ...	310		
Total	6414	Total	3718

BULSAR			
Imports		*Exports*	
Commodities	1959-60	Commodities	1959-60
Building materials ...	1499	Bamboo	941
Onions	1696	Food grains	1093
Timber	404	Mangoes	46
Fire wood	149	Timber	3352
Fish	149	Charcoal	1129
G. N. oil	117	Fire wood	1906
Lime	146	Tiles	353
General Cargo ...	762	General Cargo	374
Total ...	4922	Total	9174

Regulated Markets

The agricultural produce market committees in the district *viz* those of Surat, Bulsar, Bilimora, Bansda and Mahuva achieved further progress as revealed by their annual reports in the execution of the scheme of regulated markets, thereby giving greater benefit of Government legislation to various participants in the markets. Statement showing market functionaries and market charges in these markets are given in the subsequent pages.

The following details, as shown in the reports, concerning these market committees, will give an idea regarding their working.

The Agricultural Produce Market Committee, Surat, was established in 1951. The annual reports, commencing from 1957-58 to 1959-60 state that the financial position of the Committee has, of late, improved as compared to previous years because of favourable seasons. The district produces vegetables of all types abundantly and vegetables like *Parvar* and *Papdi* are exported to Bombay, Ahmedabad, Baroda etc. More and more agriculturists are taking the benefit of the regulated market and as such it results in the increase in the income of the market committee indirectly by way of Cess fee, Licence fee, etc.

Below is given a statement of total arrivals of vegetables including ginger, chillies (green) and lemons.

Year	Arrivals in B. mds	Approximate Value in Rs.	Exports B. mds.	Value (app.) Rs.
1957-58	10,70,126	135,96,227	3,02,354	35,86,069
1958-59	10,51,456	164,04,945	3,30,631	47,61,426
1959-60	9,93,410	136,34,246	3,08,807	36,37,006

The income of the market committee during 1959-60 was Rs. 41,364 After meeting all the expenditure which was to the tune of Rs. 26,493 the committee credited the surplus amount Rs. 14,871 to the permanent fund. In the previous year too there was a surplus of Rs. 17,753 and it was also credited to the permanent fund. The committee had be that year an income of Rs. 11,618 and Rs. 20,744 by way of licence fee and market cess.

The transactions of Co-operative marketing societies in Surat licenced by the market committee are shown below :—

No.	Name of Society	Sale in B. mds.	value realised (Rs.)
1.	The Surat District Co-op. Purchase and Sale union, Ltd., Surat ...	40,655	6,74,840
2.	The Puna-Kumbharia Group Fruit & Vegetable growers Co-op. Society Ltd., Surat. ...	1,413	23,470
3.	The Surat Retail and wholesale Vegetables Co-op. Purchase and Sale Society Ltd., Surat ...	40,996	2,86,972

The Bulsar Agricultural Produce Market Committee, Bulsar was established in the year 1958-59 to regulate sales in paddy (husked and unhusked), *val*, *gul* and castorseeds. The Committee derived Rs. 12, 888 and Rs. 6642 by way licence fee and cess during 1958-59 and Rs. 9,670 and Rs. 9,819 respectively in 1959-60. Income and expenditure account of this market Committee during 1959-60 showed a surplus of Rs. 15,849, which was credited to its permanent fund. The arrivals of the regulated commodities decreased in 1959-60 as compared to the previous year due to unfavourable monsoon. The statement of arrivals is shown separately on page 1014.

The regulated market at Bansda was established in 1957-58 to regulate sales in rice, jowar, *tuver*, *nagli*, *val*, *adad*, cotton and groundnut. The committee, constituted under the Bombay Agricultural Produce Markets Act, 1939, consisted of 15 members, of whom seven represented agriculturists, 4 represented traders, one member represented local authorities and the rest were government-nominees. The income of the market committee (1959-60) was Rs. 10,92075 which included Rs. 8,032 Rs. 2,775 being the amount of licence and market fees. The surplus (Rs. 3,949) that remained after meeting all the expenses was credited to the permanent fund.

The statement of arrivals of regulated commodities for 1957-58 o 1959-60 is shown on subsequent pages. The transactions of co-operative societies which are licence holders of the market committee during 1959-60 are listed below.

Name of Society	Commodity	Sales by way of commission B. md.	Direct sale & purchase B. md.	Total value of produce Rs.
Bansda Taluka Co-op. Purchase & Sale Union Ltd.,	Paddy (unhusked)	48,325	526	8,70,145
Shree M. P. Co-op. Society; Bansda ...	,,	—	2,030	33,073

The regulated market at Bilimora was established in 1958-59 and Bilimora and Chikhali talukas were declared as market area and sub-market yards were established in Gandevi, Chikhali, Bilimora and Amalsad. All villages of Gandevi mahal and villages of Chikhali taluka within a radius of five miles from Chikhali were declared as villages of market proper. The income and expenditure statement of the market committee revealed a surplus of Rs. 17,580 in 1959-60, while in the previous year there was a surplus of Rs. 22,493. The market committee sold regulated commodities to the tune of 5,45,656 B.mds and 5,94,676 B.mds during 1958-59 and 1959-60 brought by agriculturists from outside the market yard.

The regulated market at Mahuva was established in the year 1957. The main market yard and sub-yards were established at Mahuva and at Anaval and Karchelia. Statement of arrivals of regulated commodities for the year 1957-58 to 1959-60 are given in the subsequent pages. The income and expenditure statement in 1959-60 showed a surplus of Rs. 914 the income being Rs. 8,857-83 and expenditure Rs. 7,943. Its permanent fund stood at Rs. 11,666 at the end of August 1960. The transactions of co-operative societies in the Mahuva market for the yaer 1959-60 are also shown in statement No. 8.

TABLE No. 1

Statement showing market functionaries in the regulated markets of Surat District during 1959-60

Category	Surat	Mahuva	Bulsar	Bilimora	Bansda
A class Traders ...	32	43	52	115	48
B class Traders ...	80	16	53	53	28
Joint class Traders ..	—	125	—	—	5
General Commission Agents	42	1	10	27	—
C class Traders ..	—	—	243	328	157
D class Traders ...	—	—	—	—	12
Brokers ...	—	—	—	—	1
Weighmen .	—	—	4	228	—
Hamals ...	1,114	—	—	14	—
Total Licence fees collected; (Rs.) ...	11,618	—	9,670	20,149	8,032

TABLE No. 2

***Market charges obtaining in regulated markets of the district during* 1959-60.**

Category	Unit	Rate	Remarks
(1) Mahuva			
Commission ...	per Rs. 100/-	Rs. 1-00	Paid by seller
Hamali ...	per B. md.	Rs. 0-02	,,
Tolai ...	,,	Rs. 0-02	,,
Market cess ...	,,	Rs. 0-02	,,
Market cess on cotton...	per Bhar	Rs. 1-00	,,
(2) Bansda			
Market fee ... (On all regulated commodities)	per B. md.	Rs. 0-02	Paid by seller
Commission—			
(1) Cotton ...	per Rs. 100/-	Rs. 0-50	,,
(2) All regulated commodities except cotton	,,	Rs. 0-75	
Hamali & Tolai ...			
(1) Groundnut ..	per bag of 3 to 4 mds.	Rs. 0-06	paid by buyer
(2) All commodities except Groundnut	,,	Rs. 0-12	,,
(3) Bulsar			
Market fee ...	per B. md.	Rs. 0-02	Paid by seller
Commission ...	per Rs. 100/-	Rs. 0-50	,,
Tolai ...	per B. md.	Rs. 0-02	,,
Hamali ...	,,	Rs. 0-02	,,

TABLE No. 3

Statement showing prices per B. mds. of regulated commodities in Sura marke during 1959-60.

No.	Commodity	Prices (Average) Rs.nP.
1.	Potato	12-08
2.	Sakkaria	7-33
3.	Suran	7-47
4.	Ratalu	21-20
5.	Onions	6-46
6.	Tomato	17-39
7.	Ringana	12-81
8.	Kobij	14-87
9.	Kobij-flower	19-41
10.	Ladies finger	19-41
11.	Guvar	17-47
12.	Fansi	13-47
13.	Cholafali	12-22
14.	Valor	14-84
15.	Papdi	31-11
16.	Tuver-green	16-56
17.	Giloda	10-54
18.	Dudhi	9-62
19.	Karela	15-12
20.	Saragva	11-87
21.	Turiya	9-91
22.	Parvar	23-60
23.	Chibhda	8-77
24.	Kolu	6-20
25.	Kakadi	11-92
26.	Kankoda	37-06
27.	Tindors	8-00
28.	Gajar	7-84
29.	Mogri	21-16
30.	Peas (green)	28-67
31.	Chillies (green)	21-20
62.	Ginger	35-72
33.	Garlic	21-81
34.	Turmeric (green)	13-35
35.	Coriander	32-58
36.	Lemon	19-20

TABLE No. 4

Statement of arrivals of regulated commodities in Bulsar.

(Quantity in B. mds.)

Commodity	1958-59	1959-60
Rice	72,752	40,560
Paddy	1,492	7,315
Val	434	8,944
Castorseeds	14	8,225
Gul	—	1,18,598

TABLE No. 5

Statement showing arrivals of regulated commodities in Bansda market.

(Quantity in B. mds.)

Commodity	1958-59	1959-60
Paddy (Unhusked)	99,108	87,278
Rice	3,481	3,804
Groundnut (shelled)	2,227	4,397
Bavto	3,023	4,578
Cotton	9,229	10,074
Jowar	28,885	27,294
Val	739	866
Tuver	404	139
Adad	553	349

TABLE No. 6

Statement showing average prices per B. md. of regulated commodities in. Bansda Market.

(*Prices in Rupees and Naye Paise*)

Commodity	1958-59	1959-60
Paddy (unhusked)	16-74	17-65
Rice	28-51	33-65
Groundnut (shelled)	20-00	23-25
Bavto	13-00	13-50
Cotton	33-40	39-00
Jowar	15-25	17-00
Val	18-31	13-75
Tuver	19-98	18-75
Adad	16-91	16-50

TABLE No. 7

Statement showing arrivals of regulated commodities in Bilimora market.

Commodity	1958-59 B. mds.	1959-60 B. mds.
Rice	1,58,019	74,332
Jowar	159	20
Mangoes	79,740	48,243
Chiku	31,421	53,261
Val	971	607
Paddy	125	308
Cotton	2,400	2,426
Total ...	2,72,835	1,79,197

TABLE No. 8

Statement showing transactions of Co-operative marking societies in Bilimora market during 1959-60.

No.	Name of Society	Rice B. md.	Mangoes B. md.	Chiku B. md.	Cotton B. md.
1.	Amalsad V. Co-op. Society .	900	13,118	28,608	—
2.	Gandevi ,, ...	1,491	7,639	4,44,553	—
3.	Gadat ,, .	—	16,790	—	-
4.	Bilimora ,, ..	113	418	—	—
5.	Kharel ,,	2,400	2,653	—	—
6.	Donaja ,, .	790	-	—	—
7.	Tankal ,, ..	991	-	-	—
8.	Chikhali ,, ..	379	—	—	—
9.	Agashi ,, .	2,119		—	—
10.	Fadvel ,,	1,505		—	—
11.	Panikhadak ,, .	348		—	—
12.	Ghej ,, .	374	—	—	—
13.	Chikhali Taluka Co-op. Banking Union Ltd.	53		—	—
14.	Ranveri Khurd Co-op. Cotton sale Society Ltd.	-	—	—	6,849
	Total ..	11,463	40,618	33,161	6,849

TABLE No. 9

Statement showing arrivals of regulated commodities at Mahuva.

Commodity	Arrivals in B. mds.			Value in Rupees		
	1957-58	1958-59	1959-60	1957-58	1958-59	1959-60
Rice ...	1,650	19,376	13,909	36,000	1,71,264	2,08,635
Paddy ...	14,000	2,476	2,264	1,96,000	59,429	54,336
Groundnut...	20,000	17,716	15,864	3,60,000	1,41,728	2,85,552
Jowar ...	20,000	27,664	30,735	2,40,000	1,93,648	5,51,030
Cotton ...	32,000	16,098	7,035	12,80,000	3,21,960	2,95,470

TABLE No. 10

Statement showing the sales through licenced cooperative societies during 1959-60.

Name of Societies	Commodity	B. mds.	Value of the produce sold. (Rs.)
The Mahuva M. P Society.	Paddy. (husked)	821	19,704/-
The Naladhara M. P. Society.	„ „	111	2,664/-
The Kharavan M. P. Society.	„ „	445	10,680/-
	Groundnut	178	3,204/-
	Jowar	930	16,740/-
The Boria M. P. Society.	Jowar	266	4,788/-
	Rice.	226	5,376/-

TABLE No. 11

Statement showing the number of registered dealers and their total turnover for the Surat City Divisions I and II.

(Figures of G. T. O. are in thousands)

Area	Foodstuffs and Hotels		Clothing and Consumer Goods		Building Materials		Transport and Vehicle Goods		Machinery and Capital Goods		Fuel and Power		Industrial Commodities		Miscellaneous Goods		Total All Commodities	
	No	G.T.O	No.	G.T.O	No	G.T.O	No	G.T.O.	No.	G.T.O	No.	G.T.O.	No.	G.T.O.	No.	G.T.O	No.	G.T.O.
Surat City Division I ..	256	43,305	1023	2,64,493	18	2,974	1	156	31	2,307	3	276	74	34,457	51	6,474	1,457	3,54,462
Surat City Division II	482	67,160	769	1,54,985	88	9,643	18	1,631	88	19,095	19	12,609	235	56,553	283	43,912	1,982	3,67,588
	738	1,10,465	1792	4,19,478	106	12,617	19	1,787	118	21,402	22	12,885	309	91,010	334	50,386	3437	7,22,050

TABLE No. 12

Statement showing the number of registered dealers and their total turnover for the district for the period 1-4-1960 to 31-3-1961 (for Bansda, Mahuva, Dharampur, Navsari, Gandevi, Bilimora, Amalsad, Bulsar, Bulsar taluka, Pardi, Chikhali, Umbergam and Ahwa).

Area	Foodstuffs and Hotels		Clothing and Consumer Goods		Building Materials		Transport and Vehicle Goods		Machinery and Capital Goods		Fuel and Power		Industrial Commodities		Miscellaneous Goods		Total All Commodities	
	No.	G T O	No.	G T O	No	G T O.	No.	G T O.	No.	G T.O	No.	G.T.O.	No.	G.T.O.	No.	G.T.O.	No.	G.T.O.
1. Bansda Taluka	24	289	5	39	18	302	—	—	—	—	—	—	—	—	—	—	47	630
2. Dharampur Taluka	23	132	5	15	8	50	—	—	—	—	—	—	1	10	—	—	37	207
3. Mahuva Taluka	15	205	—	—	2	49	—	—	—	—	—	—	—	—	—	—	17	254
4. Navsari City	113	1599	186	5656	31	410	—	—	6	62	3	103	18	290	—	—	357	8120
5. Navsari Taluka	64	703	23	639	7	79	—	—	—	—	—	—	—	—	—	—	94	1421
6 Gandevi Taluka	27	335	52	239	4	227	—	—	—	—	—	—	1	4	—	—	84	805
7. Bilimora City	64	1022	45	2904	29	686	—	—	6	143	4	80	14	280	—	—	162	5115
8. Amalsad Taluka	23	1347	2	989	2	12	—	—	1	9	1	15	1	15	—	—	30	2387
9. Bulsar City	131	2539	60	609	19	161	—	—	8	95	4	21	29	167	—	—	251	3592
10. Bulsar Taluka	14	301	9	34	36	1959	—	—	—	—	2	9	2	359	—	—	63	2662
11. Pardi Taluka	157	1069	21	178	19	257	—	—	3	15	4	51	5	61	—	—	209	1641
12. Chikhali Taluka	33	450	26	245	6	54	—	—	—	—	2	24	2	26	—	—	69	799
13. Ahwa Taluka	5	49	—	—	31	298	—	—	—	—	1	4	—	—	—	—	37	351
14. Umbergam Taluka	47	603	8	107	23	228	—	—	—	—	1	9	—	—	—	—	79	947
Total	740	10643	442	11654	235	4782	—	—	24	324	22	316	73	1212	—	—	1536	28931

TRANSPORT AND COMMUNICATIONS

Post and Telegraph Offices

In 1958-59 there were 373 Post Offices, 51 Telegraph Offices and 31 Telephone Offices in the district.

TABLE No. 1

ROADS

Statement showing road mileage in the district in 1958-59.

Agency	Metalled Miles	Non-metalled Miles	Total Miles
Public Works Department	583	272	855
Roads constructed by Public Works Department but transferred to District Local Board.	97	101	198
District Local Board Roads	81	1,031	1,112
Total ...	761	1,404	2,165

DIRECTORY OF VILLAGES AND TOWNS:

EXPLANATION OF COLUMN HEADINGS; SYMBOLS AND ABBREVIATIONS USED.

1. The names of towns and villages are arranged in alphabetical order.

2. The distance, wherever shown is given in miles and furlongs.

3. In column I, the names of villages and towns are given both in English and Gujarat; and the names of the taluka/peta to which the villages and towns belong have been shown against their respective names.

Following abbreviations have been used for showing the name of various talukas/petas of the district :—

(1)	BNS. ...	Bansda ;	(10)	Mdv. ..	Mandvi ;
(2)	BRD. ...	Bardoli ;	(11)	Mgl. ...	Mangrol ;
(3)	BLR. .	Bulsar ;	(12)	Nvr. ..	Navsari ;
(4)	CKL .	Chikhali ;	(13)	Opd.	Olpad ;
(5)	CRS ..	Chorasi ,	(14)	Pln. ..	Palsana ;
(6)	DRP.	Dharampur ;	(15)	Prd. ..	Pardi ;
(7)	GND. ..	Gandevi ;	(16)	Sgd .	Songadh ;
(8)	KMJ. ...	Kamrej ;	(17)	Vld .	Valod ;
(9)	MHW. ...	Mahuwa ;	(18)	Vra ..	Vyara.

The English spellings are marked diacritically as under :—

ā – આ; ī – ઈ; ū – ઊ; e – એ; ṛ – ઋ; c – ચ; ch – છ; ṭ – ટ; ṭh – ઠ; ḍ – ડ; ḍh – ઢ; n – ન; ṅ – ઙ; ñ – ઞ; ṇ – ણ; s – સ; ś – શ; ṣ – ષ; ḷ – ળ

Unaccented vowel at the end of the syllable or word is often dropped.

4. In column II, the direction of the villages and towns have been shown in relation to the taluka/peta headquarters. The following abbreviations have been used for indicating the direction.

N.	North ;	NE	North-East ;
S.	South ;	NW. . .	North-West ;
E.	East ;	SE ..	South-East ;
W.	West;	SW.	South-West.

5. In the column VI, the bazar days have been shown under the following abbreviations:—

Sun.	Sunday.
Mon.	Monday.
Tue.	Tuesday.
Wed.	Wednesday.
Thu.	Thursday.
Fri.	Friday.
Sat.	Saturday.

6. In column VIII, the following abbreviations have been used for indicating the sources of drinking water supply :

w.	...	Well.	rv.	...	river.
str.	...	stream.	spr.	...	spring.
t.	...	tank.	pl.	...	pipe line.
o.	...	scarcity of water.	p.	...	pond.
br.	...	brook.	cl.	...	canal water.
n.	...	nala.	rs.	...	reservoir.

7. In the column IX, the following abbreviations and symbols are used :

sl. (school) ; (h)-(high) ; (m)-(middle) ; (pr)-(primary),

cs.—co-operative society ; ((c)-credit ; (fmg)-farming ; (i)-industrial ; (mis)-miscellaneous ; (mp)-multipurpose ; (sp)-sale and purchase ; (con)-consumers ; (lif)-lift irrigation society).

fr.	...	fair.	Ct.	...	Chaitra.
Vsk.	...	Vaishakh.	Jt.	...	Jaistha.
Asd.	...	Ashadh.	Srn.	...	Shravan.
Bdp.	...	Bhadrapad.	An.	...	Ashwin.
Kt.	...	Kartik.	Mrg.	...	Margashirsh.
Ps.	.	Paush.	Mg.	...	Magh.
Phg.	...	Phalgun.	Sud.	...	Suddha.
Vad.	...	Vadya.	ur.	. .	Urs.
tl.	...	temple.	M.	...	math.
mq.	...	mosque.	dg.	...	dargah.
dh.	...	dharmashala.	gym.	...	gymnasium.
ch.	...	chora.	lib.	...	library.
dp.	...	dispensary.	pyt.	.	panchayat.
mun.	...	municipality.	cch.	...	church.

DIRECTORY OF VILLAGES AND TOWNS

Serial No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati. 1	Direction; Travelling distance. from taluka/peta H.Q. 2	Area (Sq. miles.); Population. Households; Agricultural Population. 3	Post office; Distance in miles 4
1	Ābhavā CRS.; આભવા	S; 8–2	1.9; 1016; 231; 706	Local;
2	Abrāmā BLR.; અબ્રામા	E; 2–0	2.4; 5255; 1121; 557	Local
3	Abrāmā KMJ.; અબ્રામા	W; 6–0	4 0; 851; 177; 752	Kathor; 1–0
4	Abrāmā NVR.; અબ્રામા	SW; 8–0	6.3; 4287; 904; 2095	Local;
5	Āchalawā SGD.; આછલવા	NW; 5–0	2 1; 191; 33; 191	Songadh; 5–0
6	Achāraṇ OPD.; અછારણ	E; 4–0	0.7; 558; 109; 482	Sandhier; 1–0
7	Āchavaṇī CKL.; આછવણી	SE; 10–0	4.8; 1964; 317; 1949	Khergam; 3–0
8	Āchopālo VRA.; આછોપાલો	E; 18–0	2 8; 70; 15; 69	Buhari 5–0
9	Aḍadā NVR.; અડદા	SE; 4–0	2.0; 976; 207; 829	Local;
10	Āḍagām SGD.; આડગામ	E; 31–0	0.8; 193; 34; 191	Navapur, 14–0
11	Aḍājaṇ CRS.; અડાજણ	W; 2–4	1.9; 3387; 697; 2224	Local;
12	Āḍamor OPD.; આડમોર	W; 7–2	1.4; 449; 90; 412	Pinjrat; 2–0
13	Adyāpor VLD.; અધ્યાપોર	NW; 4–4	1.0; 303; 53; 282	Buhari; 5–0
14	Āfawā BRD.; આફવા	SE; 2–0	1.6; 1150; 228; 996	Local;
15	Agāsavāṇ SGD.; અગાસવાણ	E; 9–5	2.8; 777; 140; 755	Songadh; 9–0
16	Agāśī CKL.; અગાશી	SE; 13–0	1.5; 770; 138; 765	Fadwel; 4–0
17	Agāsiā VLD.; અગાસીઆ	S; 4–0	0.3 ......deserted ...	....
18	Ajarāi GND.; અજરાઈ	NW; 1–6	1.0; 802; 157; 493	Gandevi; 1–0
19	Ajawār SGD.; અજવાર	N; 15–0	0.0; 24; 2; 18	Songadh; 15–0
20	Ākhākhol KMJ.; આખાખોલ	N; 6–0	1.7; 191; 43; 68	Kathor; 1–0
21	Akoṭī BRD.; અકોટી	NE; 7–2	1.7; 1431; 275; 1248	Local;
22	Alagaṭ MHW.; અલગટ	E; 8–0	1.3; 428; 78; 418	Anaval; 9–0
23	Alagaṭ VLD.; અલગટ	SW; 7–0	1.9; 774; 142; 732	Buhari; 5–0
24	Ālak NVR; આલક	N; 10–0	1.1; 325; 63; 115	Veshma; 1–0
25	Alathāṇ CRS.; અલથાણ	SW; 4–4	1.3; 457; 97; 434	Local;

Railway St.; Distance in miles.		Weekly Bazar; Distance; Bazar Day.			Motor Stand; Distance in miles.		Drinking water facilities	Institutions and other information.
5		6			7		8	9
Surat,	8-0	Surat;	6-4	Sat.	Magdalla;	2-0	.w	sl. (pr).; pyt.; 4tl.; 2dh.
Bulsar;	1-0	Bulsar;	1-0		Bulsar;	1-4	w.,t., rv.	2sl (2pr).; pyt.; cs. (fmg.); 4tl.; mq.; dg.; lib.
Sayan;	4-0	Surat;	7-0;	Sat.	Dunger;	2-0		sl (pr).; pyt.; cs. (c.); fr. (Ct. Sud. 15); 2tl.; dh.; ch.; lib.
Vedchha;	2-4	Local;			Local;		w., p.;	2sl (pr., h.); pyt.; cs. (c., mis).; fr. (Ps. Sud Makar Sankranti); 5tl.; mq.; dh.; ch.; 2lib.; 5dp.
Songadh;	5-0	Songadh;	5-0	Sun.	Songadh;	5-0	w.	
Sayan;	5-0	Surat;	12-0	Sat.	Sandhier;	1-2	w.	sl (pr).; pyt.; tl.; lib.; dp.
Bulsar;	18-0	Khergam;	3-0		Khergam;	3-4	w.	sl (pr).; pyt.; dg.
Unai;	6-0	Balpur;	2-4	Mon.	Gadat;	8-0	w., rv.	pyt.
Vedchha;	3-0	Navsari;	2-0;	Sun.	Local;		w.	sl (pr).; cs.; 2tl.; mq.; dh.; ch.
Navapur;	14-0	Navapur;	14-0;	Sat.	Navapur;	14-0	w.	sl (Lokshala);
Surat;	3-0	Surat;	2-0;	Sat.	Local;		w.;rv.	sl. (pr).; pyt.; cs.; (mp.); 3tl.; mq.; 4dg.; ch.; lib.; 3dp.
Surat;	14-0	Surat,	14-0;	Sat.	Kundiana;	1-0	w., p.	sl (pr).; tl.
Madhi;	15-0	Buhari;	5-0;	Wed.	Buhari.	3-0	w.	sl (pr).; pyt.; ch.
Bardoli;	3-0	Bardoli;	3-0;	Sat.	Local;		w.	sl (pr.).; pyt.; tl.; lib.
Vyara;	4-0	Songadh;	9-0;	Sun.	Vyara;	4-0	w.	sl (pr.); pyt.; ch.
Bilimora;	16-0	Fadwel;	4-0;	Fri.	Fadwel ;	4-0	w.,rv.	sl (pr).; tl
....		....			...deserted	......	....	....
Amalsad;	2-0	Gandevi;	1-0;	Wed.	Local;		w., t.	sl (pr).; 3tl.; dg.; 2dh.; ch.
Songadh;	15-0	Songadh;	8-0;	Mon.	Songadh;	15-0	n.	
Sayan;	4-0	Surat;	7-0;	Sat.	Pardi;	1-4	w.	pyt.
Timberva;	2-0	Kadod;	3-0;	Sun.	Kantari;	1-4	w.,n.	sl (pr).; pyt.; tl.; dg.; ch.; lib.; 2dp.
Anaval;	9-0	Valvada;	1-4;	Sun.	Valvada;	2-0	w.	sl (pr).; pyt.; mq.
Madhi;	15-0	Buhari;	5-0;	Wed.	Bhagwanpor;	2-0	w.	sl (pr).; cs. (c.); lib.
Maroli;	7-0	Maroli;	7-0;		Veshma;	2-0	w.	sl (pr).; pyt.
Surat	4-0	Surat;	4-0;	Sat.	Surat;	4-0	w.	sl (pr).; 3tl.

Serial No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati. 1	Direction; Travelling distance from taluka/peta H. Q. 2	Area (Sq. miles.); Population; Households; Agricultural Population. 3	Post office; Distance in miles. 4
26	Ālipor CKL; આલીપોર	N; 3–0	3.9; 3261; 744; 1038	Local;
27	Allu BRD; અલ્લુ	W; 6–0	0.8; 726; 156; 664	Vankaner; 1–0
28	Alurā KMJ.; અલુરા	S; 4–4	1.0; 225; 48; 213	Haldharu; 1–0
29	Alurā NVR.; અલુરા	E; 5–0	1.4; 348; 83; 433	Maroli; 5-0
30	Āmaḍapur NVR.; આમડપુર	E; 5–1	1.0; 1037; 221; 886	Amli; 1–0
31	Āmadhā DRP.; આમધા	N; 10–0	3.3; 624; 118; 614	Dharampur; 10-0
32	Āmadharā CKL.; આમધરા	E; 4–4	4 7; 2331; 421; 2048	Local;
33	Āmakhuṭā MGL.; આમખુટા	S; 6–0	3.3; 709; 101; 694	Wankal; 2-0
34	Amalacunī MDV.; અમલચુની	NE; 6–6	0.5; 29; 3; 29	Mandvi; 6-6
35	Āmaladī SGD.; આમલદી	N; 15–0	0.1; 47; 7; 47	Songadh; 15-0
36	Āmalaguṇḍī SGD.; આમલગુંડી	SE; 9–0	2.3; 633; 106; 633	Songadh, 9-0
37	Āmalapāḍā SGD.; આમલપાડા	NE; 18–0	2.2; 506; 78; 474	Songadh: 18-0
38	Amalasāḍ GND.; અમલસાડ	W; 4–0	2.2; 3052; 620; 999	Local;
39	Amalasāḍī MDV.; અમલસાડી	W; 3–0	2.0; 1363; 243; 1336	Godsamba: 0-4
40	Amalasāḍī PLN.; અમલસાડી	E; 5–0	1.0; 584; 122; 562	Ena; 1-4
41	Amalavāṇ MDV.; અમલવાણ	NE; 8–0	0.2; 24; 4; 24	Mandvi; 8-0
42	Āmalī MDV.; આમલી	N; 11–0	0.9; 161; 23; 161	Zankhavav; 4-0
43	Āmalī NVR.; આમલી	E; 4–2	0 8; 1081; 213; 264	Local;
44	Āmaḷī PRD.; આમળી	NW; 3–4	1.3; 985; 190; 831	Paria; 1-0
45	Āmalī SGD.; આમલી	NW; 10-0	1.5; 309; 51; 307	Songadh; 10-0
46	Āmalīdābhaḍā MGL; આમલીદાભડા	E; 15–0	1.5; 445; 66; 445	Wankal : 11-0
47	Āmalīpāḍā SGD.; આમલીપાડા	N; 5–0	1.9; 361; 60; 360	Songadh; 5-0
48	Āmakac MHW.; આમકચ	E; 4–0	1 8; 975; 194; 898	Local;
49	Āmakuṭī SGD.; આમકુટી	SE; 19–0	0.9; 281; 47; 281	Navapur; 15-0
50	Āmanaḍerā MGL.; આમનડેરા	NW; 2–0	2.6; 375; 82; 356	Mangrol; 1–4

Railway St.; Distance in miles.		Weekly Bazar; Distance; Bazar Day.		Motor Stand; Distance. in miles		Drinking water facilities	Institutions and other information.
5		6		7		8	9
Chikhali Road.	1–0	Chikhali;	3–0;	Local;		w.	sl (pr).; pyt.; cs. (c.); Urs. (Sabaan 18); tl.; 3mq.; 9dg.; 21ib. 2dp.
Bardoli;	6–0	Kadod:	5–0; Sun.	Local;		rv.	sl (pr).; pyt.; ch.
Gangadhra;	4–0	Bardoli;	5–0; Sat.	Marathana;	5–0	w.	pyt.; cs. (c.); tl.;
Maroli;	5–0	Maroli;	5–0;	Mahuwar;	3–0	w.	sl (pr).; tl.; lib.
Navsari;	5–0	Navsari;	4–0; Sun.	Amli;	1–0	w.	sl (pr).; pyt.; 3tl.; dh.; lib.
Bulsar;	28–0	Nani Vahiyal;	4–0; Thu.	Nanapondha;	3–0	rv.	sl (pr.)
Bilimora;	10–0	Chikhali;	4–0;	Khergam Rd;	2–0	w.	2sl (2pr).; pyt.; cs. (c.); 2tl.; dp.
Wankal;	2–0	Wankal;	2–0; Fri.	Mosali;	6–0	w.	sl (pr).; pyt.; cs. (c.); ch.
Zankhvav;	11–4	Pipalwada;	0–6; Sat.	Mandvi;	6–6	o.	
Songadh;	15–0	Songadh;	15–0; Mon.	Singpur;	7–0	n	
Songadh;	9–0	Umarda;	3–0; Tue.	Songadh;	9–0	w.,rv.	sl (pr); pyt., ch.
Songadh;	18–0	Umarda;	5–0; Tue.	Songadh;	18–0	rv.	sl (pr)., pyt.
Local;		Sari-bujarang;	1–0;	Local;		w.,t	3sl (2pr.; h).; pyt.; cs. (c.); fr. (Kt. Sud 15); 2tl.; M.; mq.; dg.; dh.; lib.; 3dp.; Mangoe market and exporting centre of the district.
Madhi;	9–0	Amba;	2–0; Sat.	Local;		w.	sl (pr.); pyt.; cs. (fmg.); ch.
Gangadhra;	3–0	Bardoli;	8–0; Sat.	Ena;	1–4	w.,rv.	sl (pr).; fr. (Ct.Sud 15); tl.
Zankhvav;	10–0	Pipalwada;	1–6; Sat.	Sathvav;	4–0	w.	
Zankhvav;	4–0	Devgadh;	3–0; Thu.	Devgadh;	2–0	w.	sl (pr).
Navsari;	4–0	Navsari.	3–0; Sun.	Local;		w.	pyt.; tl.; dh.; lib.; dp.
Udwada;	3–0	Udwada;	3–0; Tue.	Pardi;	3–4	w.	sl (pr).; pyt.
Songadh;	10–0	Satkul;	2–0; Fri.	Songadh;	10–0	w	pyt.
Zankhvav;	4–0	Zankhvav;	4–0;	Zankhvav;	4–0	w.	sl (lokshala).
Songadh;	5–0	Songadh;	5–0; Sun.	Songadh;	5–0	w.	sl (lokshala).; pyt.; ch.
Bardoli;	12–0	Dholikui;	2–0; Sun.	Nihali;	1–0	w., rv.	sl (pr).; pyt,; cs. (c.); 2tl.; dh.; ch.; lib.
Navapur;	15–0	Navapur;	15–0; Sat.	Navapur;	15–0	rv.	ll (lokshala); pyt.
Mangrol;	2–0	Mangrol;	1–4;	Mangrol;	2–0	w.	pyt.; tl.; mq.; dg.

Serial No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati. 1	Direction; Travelling distance from taluka/peta H. Q. 2	Area (Sq. Miles.); Population.; Households; Agricultural Population. 3	Post office; Distance in miles 4
51	Āmaṇiā VRA.; આમણીઆ	E; 17–0	4.5; 101; 21; 101	Buhari; 7-0
52	Amarkuī MGL.; અમરકુઈ	E; 12–0	3.7; 67; 13; 51	Wankal; 6-0
53	Amaroli CRS.; અમરોલી	SW; 5–0	1.3; 1903; 387; 1250	Local;
54	Amarolī MHW.; અમરોલી	E; 5–0	1.0; 298; 63; 280	Sarbon; 8-4
55	Āmathavā SGD.; આમથવા	S; 20–0	1.2; 83; 13; 83	Songadh; 20-0
56	Āmbā MDV.; આંબા	NW; 7–0	2.5; 612; 126; 606	Godsamba, 2-0
57	Āmbā SGD.; આંબા	S; 6–0	1.1; 279; 43; 279	Songadh; 6-0
58	Ambāc CKL.; અંબાચ	E; 12–0	2.3; 888; 150; 888	Saravani; 1-4
59	Ambāc PRD.; અંબાચ	S; 9–0	6.1; 2736; 456; 2617	Local;
60	Ambāch VLD.; અંબાછ	E; 4–0	2.6; 1292; 230; 1015	Valod; 9-0
61	Ambaḍā NVR.; અંબા'ા	SE; 8–0	2.2; 1021; 332; 1505	Local;
62	Ambādi NGL.; અંબાડી		0.1; 68; 10; 68	Umerpada; 4-0
63	Ambābārī BNS.; આંબાબાર	E; 6-0	2.9; 274; 58; 274	Bansda; 4-0
64	Āmbā Jangal DRP.; આંબાજંગલ	SE; 26–0	5.3; 847; 147; 847	Dharampur; 26-0
65	Ambāpānī BNS.; આંબાપાની	SE; 7–0	2.4; 431; 91; 430	Bansda; 5-0
66	Āmbāpāṇī VRA.; આંબાપાણી	E; 20–0	2.5; 121; 22; 110	Songadh; 12-0
67	Āmbāper MDV.; આંબાપોર	NE; 8–0	0.6; 80; 13; 80	Mandvi; 8-0
68	Āmbā-Talāṭ DRP.;; આંબા-તલાટ	N; 6–2	7.2; 1677; 315; 1638	Dharampur; 5-0
69	Āmbāwāḍī MGL.; આબાવાડી	E; 3–0	1.4; 1217; 188; 1163	Wankal; 2-4
70	Ambhetā GND.; અંભેટા	W; 3–0	0.1; 1338; 287; 923	Local;
71	Ambheṭā OPD.; અંભેટા	SW; 5–4	2.7; 811; 152; 612	Dihen; 3-0
72	Ambheṭī DRP.; અંભેટી	SW 16–2	13.1; 2416; 433; 2392	Sukhala; 1-0
73	Ambheṭī PIN.; અંભેટી	SE; 5–0	2.0; 2001; 333; 1342	Local;
74	Āmbiyā VRA.; આંબીયા	S; 9–0	1.8; 723; 121; 719	Buhari; 4-0
75	Āmboli KMJ.; આંબોલી	W; 2–4	1.4; 395; 74; 328	Kathor; 0-4
76	Āmboniā VRA.; આંબોનીઆ	S; 29–0	1.0; 151; 29; 151	Unai; 4-0

Railway St.; Distance in miles. 5	Weekly Bazar; Distance; Bazar Day. 6	Motor Stand; Distance. 7	Drinking water facilities 8	Institutions and other information. 9
Unai; 7-0	Bhenskatri; 3-0; Sun.	Gadat; 10-0	w.; rv.	pyt.
Zankhvav; 1-0	Zankhvav; 1-0;	Zankhvav; 1-0	w.	pyt.; cs. (c.)
Utran; 0-5	Surat; 2-0; Sat.	Fulpada; 0-4	w., rv.	sl (pr).; pyt.; cs. (mp.); 2tl.; dh.; ch.; 2lib.; dp.
Bardoli; 10-0	Dholikui; 3-0; Sun.	Sarbhon; 2-0 Vadoli; 1-0	w., rv.	tl.
Songadh 20-0	Umarda: 5-0; Tue.	Songadh; 16-0	n.	
Madhi; 15-0	Local; Sat.	Kasaal; 1-0	w., n.	sl (pr.); pyt.; cs.
Songadh; 6-0	Songadh; 6-0; Sun.	Songadh; 6-0	w., n.	pyt.
Bilimora; 18-0	Chikhali; 12-0;	Fadwel; 4-0	w., str.	2sl (pr). (lokshala);pyt.; tl.
Vapi; 4-0	Vapi; 4-0;	Paria; 3-0	w., rv.	sl. (pr).; pyt.
Madhi; 13-0	Valod; 4-0; Fri.	Local;	w., rv.	sl. (pr).; pyt.; cs.(mis). ch.
Navsari; 10-0	Navsari; 8-0; Sun.	Local	w.,p.	sl(pr).; pyt.; cs.; 2tl.; mq.; dh.; ch.; lib.; dp.
Umerpada; 4-0	Umerpada; 4-0;			
Kerdi Road; 2-4	Khambla; 1-4; Tue.	Todpada; 2-0	w.,rv.	sl(pr).; dg.
Bulsar; 44-0	Huda; 9-0; Tue.	Dharampur;26-0	w.,p.	sl(pr).
Vaghai; 5-0	Khambla; 2-0; Tue.	Bansda; 5-0	w.	sl(pr).; cs. (c.).
Songadh; 12-0	Bhenskatri; 2-0; Sun.	Songadh; 12-0	rv.	pyt.
Zankhvav; 13-0	Pipalwada; 4-0; Sat.	Gam talao Khurad; 4-0	w.	
Bulsar; 23-0	Local;	Dharampur; 6-0	w.,rv., n.,p.	sl(pr).; pyt.
Wankal; 2-4	Wankal; 2-4; Fri	Mangrol; 3-0	w.,n.	sl(pr).; pyt.; cs.; mq.; dg.; ch.
Chikhali Road 3-0	Gandevi; 4-0; Wed.	Gandevi; 3-0	w.,t., str.	sl(pr).; pyt.; mq.; 2dg. ch.
Surat 9-0	Surat; 9-0; Sat.	Local;	w.	sl(pr).; cs.; tl.; dh.; ch.; dp.
Pardi; 8-0	Sukhla ; 1-0; Fri	Rohina; 4-0	w.,rv.	3Sl(3pr).; tl.
Gangadhra; 6-0	Veshma; 3-0;	Veshma; 4-0	w.	sl(pr).; pyt.; 2tl.; dh.; ch.; lib.; 2dp.
Vyara; 10-0	Balpur; 3-0; Mon.	Bamnamal-najik; 1-4	w.	sl(pr).; pyt.; cs.; lib.
Sayan; 5-0	Surat; 10-0; Sat.	Kathor; 0-4	rv.	sl(pr).; pyt.; 2tl.; ch.;
Kalaamba; 3-0	Pipalvada; 4-0; Mon.		w.	sl(lokshala).

Serial No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati. 1	Direction; Travelling distance from taluka/peta H.Q. 2	Area (Sq. Miles.); Population.; Households; Agricultural Population. 3	Post office; Distance in miles 4
77	Anāval MHW.; અનાવલ	S; 18–0	3.5; 2010; 402; 1539	Local;
78	Añcelī BRD.; અંચેલી	S; 7–0	0.4; 156; 31; 155	Sarban; 2-0
79	Añcelī GND.; અંચેલી	W; 5–4	0.8; 737; 149; 549	Amalsad; 2-4
80	Andhātrī MHW.; અંધાત્રી	E; 5–0	0.8; 325; 60; 323	Mahuwa; 3-0
81	Andhātrī VLD.; અંધાત્રી	S; 7–4	2.5; 1486; 267; 1047	Buhari; 1-0
82	Andhātrī Devagadh MDV.; અંધાત્રી દેવગઢ	NE; 14–0	0.7;	Deserted
83	Andhārapādā DRP.; અંધારપાડા	SE; 3–0	0.3; 179; 30; 179	Sukhala; 6-0
84	Andhāravādīdūr VRA.; અંધારવાડી દૂર	SE; 16–0	1.8; 1022; 185; 1017	Buhari; 7-0
85	Andhāravādīnajīk VRA.; અંધારવાડી નજીક	SW; 3–0	1.0; 340; 68; 335	Vyara; 2-0
86	Āndhī OPD.; આંધી	NE; 2–2	1.8; 165; 32; 153	Olpad; 2-0
87	Āngaladharā MHW.; આંગલધરા	S; 19–4	2.0; 430; 90; 420	Anaval; 2-0
88	Anītā OPD.; આણીતા	N; 13–0	2.7; 895; 140; 626	Local;
89	Añjalāv BLR.; અંજલાવ	SE; 7–0	2.6; 1046; 198; 982	Ranvel; 2-10
90	Āñjaṇā CRS.; આંજણા	E; 2–0	0.6; 152; 42; 92	Surat; 1-00
91	Āṅkadod MGL.; આંકડોદ	SW; 4–0	2.5; 699; 149; 382	Simodra; 2-4
92	Aṅkalāc BNS.; અંકલાચ	SW; 14–0	4.8; 959; 196; 931	Bansada; 14-0
93	Āntaliyā GND. આંતલિયા	SE; 4–0	1.1; 999; 212; 344	Bilimora; 2-0

Railway St.; Distance in miles. 5	Weekly Bazar; Distance; Bazar Day. 6	Motor Stand; Distance. 7	Drinking water facilities 8	Institutions and other information. 9
Local;	Local Wed.	Local;	w.,rv., t.	sl(pr).; pyt.; 2cs. (2c). Maha Shivarari fr. (Mg. Vad 13); 4tl.; mq.; 2dg.; ch.; lib.; dp(mob. with hq. at Unai); Shukleshvar Mahadev's temple, place of pilgrimage for Anavil community.
Bardoh; 8–0	Mahuwa; 4–0; Mon.	Sarbhan; 2–0	w.	
Amalsad; 4–0	Sari-- Bujarang; 3–0;	Amalsad; 2–4 Vedchha; 2–4	w.,t.	sl(pr).; pyt.; dg.
Bardoli; 11–0	Mahuwa; 3–0; Mon.	Mahuwa; 5–0	w.	sl(pr).; pyt.; cs(fmg.);
Madhi; 17–0	Buhari; 1–0; Wed.	Local;	w.,rv	2Sl(2pr).; pyt.; 2tl.; ch.
...	...	...	deserted	......
Vapi; 11–0	Sukhala; 6–0; Fri.	Nana-pandha; 10–0	w.p,.	sl(pr).
Unai; 6–0	Panchol; 0–4; Mon.	Gadat; 5–0	rv.,n.	sl(pr).; pyt.; cs.(mp).; lib.
Vyara; 2–0	Vyara; 2–0; Sat.	Paniari; 1–4	w.	sl(pr).; pyt.
Sayan; 7–0	Surat; 13–0; Sat.	Local;	w.	tl.
Anaval; 2–0	Anaval; 2–0; Wed.	Anaval; 1–4	w.,rv.	
Kim; 4–0	Surat; 20-0; Sat.	Local;	w.,rv., p.	sl., cs.; tl.; 2dg.; ch.; lib.
Bulsar, 7–0	Navera; 2–0; Sun.	Gadaria; 1–4	w.,t.	sl(pr).; pyt.; mq.
Surat; 1–4	Surat; 2–4; Sat.	Surat; 2–0	w.	tl.; mq.; This village has been selected as the site for implementing the drainage scheme of Surat Municipality under which water will be provided to the surrounding cultivable land.
Simodra; 2–4	Mangrol; 4–0;	Mangrol; 4–0	w.p,.	sl(pr).; pyt.; tl.; mq.; 6dg.; dh.; ch.
Unai; 21–0	Local; Sat.	Dharampur; 9–	w.rv, str.	sl(pr).; tl.; dg.; ch.
Bilimora; 1–4	Bilimora; 2–0;	Local;	w.,rv., t.	sl(pr).; pyt.; fr (An. Vad. 14).; dg.

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Serial No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati. 1	Direction; Travelling distance from taluka/peta H.Q 2	Area (Sq. miles); Population Households; Agricultural Population. 3	Post office; Distance in miles. 4
94	Antāpur VRA.; અંતાપુર	SE; 15–0	5.0; 1018; 203; 846	Buhari; 8
95	Anthāslā CRS.; અંથાસ્લા		.........deserted.........	
96	Antrolī MDV.; અંત્રોલી	W; 11–0	1.0; 389; 72; 338	Mandvi; 10-0
97	Antrolī KMJ.; અંત્રોલી	NW; 3–0	1.6; 332; 79; 319	Kathor; 2-0
98	Ārakāti SGD.; આરકાટી	SE; 33–0	1.7; 267; 38; 258	Navapur; 18-0
99	Ārakuṇḍ VRA.; આરકુંડ	SE; 8–0	0.8; 115; 23; 115	Vyara; 8-0
100	Araṇāī DRP.; અરણાઈ	S; 10–0	3.3; 465; 77; 465	Dharampur; 10-0
101	Aranālā PRD.; અરનાલા	E; 13–0	1.8; 711; 127; 696	Mota Vaghchhipa; 5-0
102	Arasāṇ NRV.; અરસાણ	NW; 8–0	1.3; 248; 63; 231	Maroli; 2-0
103	Areṭh MDV.; અરેઠ	W; 9–0	2.6; 1077; 197; 950	Bodhan; 5-0
104	Ariāṇā OPD.; અરીઆણા	SW; 6–0	1.1; 336; 65; 329	Dihen; 2-0
105	Asal-kāṇṭī DRP.; અસલ કાંટી	S; 40–0	1.3; 170; 33; 170	Dharampur; 40-0
106	Āsalonā DRP.; આસલોણા	SE; 36–0	9 1; 533; 105; 533	Dharampur; 36-0
107	Āsamā PRD.; આસમા	SE; 7–4	1 3; 780; 144; 755	Sonwada; 2-0
108	Āsaṇa NVR ; આસણા	N; 9-0	0 8; 572; 139; 515	Dabhel; 1-0
109	Asnābād OPD.; આસ્નાબાદ	S; 0–1	0 8; 133; 28; 116	Rander; 5-0
110	Asanāḍ OPD.; અસનાડ	N; 4–0	3 3; 525; 106; 525	Olpad; 4-0
111	Āsarmā MGL.; આસરમા	E. 8–0	1.0; 321; 74; 315	Velacha; 5-0
112	Asāramā CRS.; આસારમા		........deserted	....
113	Āsoḍalā MGL.; આસોડલા	SW; 9–0	1.3; 107; 19; 98	Wankal; 12-0
114	Āstā KMJ.; આસ્તા	SE; 8–0	1.5; 893; 156; 743	Local;
115	Aṣṭagām NVR.; અષ્ટગામ	SE; 8–6	3.4; 2835; 598; 2450	Local;
116	Astān BRD.; અસ્તાન	N; 2-0	3 2; 801; 169; 601	Bardoli; 1-4
117	Asṭol DRP.; અસ્ટોલ	S; 22–0	0 5; 635; 115; 635	Dharampur; 22-0
118	Asundar NVR.; અસુંદર	W; 6–0	1 6; 335; 63; 290	Maroli; 3-0
119	Āsurā DRP.; આસુરા	NE; 1–0	1.9; 1322; 287; 122	Dharampur; 1-4
120	Āṭ NVR.; આટ	SW; 7–0	5 1; 2658; 592; 1333	Local;
121	Aṭagām BLR.; અટગામ	NE; 9–0	5.6; 3304; 628; 3015	Local;
122	Aṭak-Pāraḍī BLR.; અટક-પારડી	SE; 3–0	0.8; 542; 110; 216	Abrama; 1-0
123	Aṭār BLR.; અટાર	S; 6–0	0.5; 313; 56; 295	Haria; 2-0
124	Atarolī PLN.; અતરોલી	W; 10–0	1.1; 519; 116; 343	Niol; 2-0

Railway St.; Distance. in miles	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance. in miles	Drinking water facilities	Institutions and other information.
5	6	7	8	9
Unai; 6–0	Panchol; 7–0; Fri.	Gadat; 4–0	w.,rv.	sl(pr).; pyt.; cs. (mp.).
...	...	...		deserted ...
Kim; 20–0	Amba; 4–0; Sat.	Areth; 1–0	w.	sl(pr).; cs.; ch.
Sayan; 4–0	Surat; 11–0; Sat.	Kathor; 2–0	w.	pyt.; cs.(mis.); 2tl.; dg.
Navapur; 18–0	Navapur; 18–0; Sat.	Navapur; 18–0	rv.	sl (lokshala).; pyt.
Vyara; 8–0	Balpur; 0–4; Mon.	Bamnamal-najik; 4–0	w.	pyt.
Bulsar; 28–0	Vahiyal; 4–0; Thu.	Nanapodha; 6–0	rv.,n.	sl(pr).
Pardi; 14–0	Lakhampore; 3–0; Sat.	Ghagadmal; 1–0	w.,t.rv.,	sl(pr).; pyt.; tl.; 2dg.
Maroli; 2–0	Navsari; 6–0; Sun.	Nadod; 0–4	w.	sl(pr).; tl.
Kim; 17–0	Bodhan; 5–0; Mon.	Local;	w.,p.	sl(pr).; pyt.; cs.; dh.; ch
Surat; 11–0	Surat; 10–0; Sat.	Ambheta; 1–0	w.	sl (lokshala).; cs.; tl.;ch
Bulsar; 63–0	Dev Dungra 3–0; Sun. (Nasik Taluka);	Dharampur;40–0	rv.,n.	
Bulsar; 54–0	Huda; 7–0; Tue.	Dharampur;36–0	p.	sl(pr).
Pardi; 8–0	Sukhlav; 3–0; Fri.	Pancheai; 1–4	w.	sl(pr).; pyt.; lib.
Maroli; 4–0	Navsari; 7–0; Sun.	Dabhel; 1–0	w.	sl(pr)., pyt ; mq.; dg.; ch.; lib.
Surat; 10–0	Surat; 10–0; Sat.	Olpad; 0–1	w.,p.	cs.
Sayan; 10–0	Surat; 14–0; Sat.	Olpad: 3–0	w.	sl(pr)..pyt.; cs.; 3tl.; dg.; dh.
Velacha; 5-0	Velacha; 5–0;		w.	pyt.; tl.
....	.. ..	.. deserted..	....	....
Zankhavav; 5–0	Zankhavav; 5–0;	Tadkeshwar; 2–4	w.	pyt.
Gangadhra; 8–0	Bardoli; 7–0; Sat.	Segawa; 0–6	w.	sl(pr).; pyt.;2tl.;ch.;lib.
Navsari; 10–0	Gandevi; 5–0; Wed.	Local,	w.	4sl(3pr;h).; pyt.; 2cs.;fr (Kt Sud 14).; 2tl.; dg.; lib.; dp.
Bardoli; 1–4	Bardoli; 1–1; Sat.	Bardoli; 1–4	w.,rv.	sl(pr).; pyt.; tl.; lib.
Bulsar; 40–0	Siladha; 4–0. Sat.	Dharampur;22–0	p.	sl(pr).
Maroli; 3–0	Navsari; 4–0; Sun.	Local;	w.	cs. (mp.).
Bulsar; 20–0	Dharampur; 1–4; Mon.	Dharampur; 1–0	w.,rv.	sl(pr).; pyt.
Navsari; 7–0	Navsari; 7–0; Sun.	Local;	w.	2sl(2pr).; pyt.; cs(m).; ur.; 3tl.; mq.; dh.;ch.; lib.; 5dp.
Bulsar; 9–0	Bulsar; 9–0; Sat.	Kalwada; 1–0	w.	2sl(2pr).; pyt.; 2cs(2c.); tl.; mq.; 2dg.; ch.;lib.
Bulsar; 3–0	Bulsar; 3–0; Sat.	Local;	w.,t., rv.	sl(pr).; pyt.; tl.; lib.
Bulsar; 6–0	Bulsar; 6–0; Sat.	Bulsar; 6–0	w.,rv.	sl(pr).; tl.
Niod; 3–0	Surat; 5–0; Sat.	Local;	w.	sl(pr).; pyt.; 2tl.; lib.

Sr. No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati. 1	Direction; Travelling distance. form Taluka peta H.Q. 2	Area (Sq. miles); Population Households; Agricultural Population. 3	Post office; Distance. in miles. 4
125	Aṭhaw. CRS.; અઠવા	W; 1–0	1.0; 3297; 710; 319	Local;
126	Aṭodarā OPD.; આટોદરા	E; 3–0	2.7; 819; 161; 743	Local;
127	Atul BLR.; અતુલ	E; 6–0	2.0; 952; 201; —	Local;
128	Auṇḍ CKL.; ઔન્ડ	SW. 2–6	3.6; 2019; 384; 1823	Local;
129	Āvadhā DRP.; આવધા	NE; 8–0	5.5; 736; 141; 736	Dharampur; 9-0
130	Avalakhaṇḍī DRP.; આવલખાંડી	E; 35–0	1.1; 141; 30; 141	Dharampur; 35-0
131	Bābalā BRD.; બાબલા	S; 7–0	0.8; 448; 77; 424	Sarbhan; 1-0
132	Bābar-khaḍak DRP.; બાબર-ખડક	N; 10–0	1.7; 583; 118; 583	Dharampur; 10-0
133	Bāben BRD.; બાબેન	N; 2–0	3.1; 628; 142; 601	Bardoli; 2-0
134	Baḍatal MDV.; બડતલ	N; 3–0	1.6; 533; 102; 533	Mandvi; 3-0
135	Bāgalapur VRA.; બાગલપુર	SE; 18–0	0.5; 187; 135; 176	Buhari; 1-0
136	Bagawāḍā PRD.: બગવાડા	S; 6–2	0.1; 515; 97; 343	Local;
137	Bagod BLR.; બગોદ	S; 7–0	1.5; 719; 134; 374	Haria; 1-0
138	Bagumarā PLN.; બગુમરા	N; 5–0	4 0, 1136; 229; 951	Local;
139	Bahej CKL.; બહેજ	SE; 10–0	1.0; 1315; 314; 1302	Khergam; 2-0
140	Bahej VLD.; બહેજ	SW; 1–2	0.4; 73; 11; 73	Valod; 1-4
141	Bālacoṇḍī DRP.; બાલચોંડી	S; 12-0	1 4; 642; 103; 642	Dharampur; 12-0
142	Bāladā BRD.; બાલદા	NE; 10–0	2.3; 1155; 209; 1016	Madhi; 3-0
143	Bālaḍā PRD.; બાલડા	E; 1–4	3.0; 1250; 280; 1084	Pardi; 1-4
144	Balakas OPD.; બલકસ	N; 4–4	1.0; 510; 65; 390	Sonsak; 0-4
145	Balālatīrth MDV.; બલાલતીર્થ	E; 10–0	0.4; 69; 8; 69	Mandvi; 10-0
146	Balālkuvā MGL.; બલાલકુવા	E; 16–0	2.8; 355; 70; 352	Wankal; 12-0
147	Bālamarāī SGD.; બાલમરાઈ	S; 4–0	0.7; 44; 7; 44	Songadh; 4-0
148	Balāṅgā MDV.; બલાંગા	E; 8–0	1.3;	deserted ....
149	Bālapur VRA.; બાલપુર	SE; 7–0	3.8; 1062; 159; 1037	Vyara; 7-0

Railway St.; Distance. 6		Weekly Bazar; Distance. Bazar Day. 6			Motor Stand; Distance. 7		Drinking water facilities 8	Institutions and other information. 9
Surat;	3–0	Surat;	1–4;	Sat.	Local;		w.	sl(pr).; pyt.; cs. (housing) 2tl.; dg.; 2dp.
Sayan;	5–0	Surat;	10–0;	Sat.	Local;		w.	sl(pr).;tl.; mq.;2dg.;dh.
Pardi;	4–0	Bulsar;	6–0;	Sat.	Local;		w.,pl.	sl(pr).; dg.; dp.
Bilimora;	5–0	Bilimora ;	5–0;		Local;		w.	3sl(3pr).; pyt.; cs.(c). 3tl.; lib.
Bulsar;	27–0	Ukta;	5–0;	Sun.	Dharampur;	8–0	rv.	sl(pr).
Bulsar;	53–0	Rajpuri Jungle;	16–0;	Thu.	Dharampur;	35–0	p.	
Bardoli;	6–0	Mahuwa;	5–0;	Mon.			w.	
Pardi;	18–0	Nani Vahiyal;	5–0;	Thu.	Nana-pondha;	2–2	w.,p., rv.	sl(pr).
Bardoli;	2–0	Bardoli;	2–0;	Sat.	Bardoli;	1–0	w.	sl(pr).; pyt.; cs.(c.).
Madhi;	9–0	Mandvi;	3–0;	Wed.	Mandvi;	3–0	.w	sl(pr).; fr (An. Vad.14).; 2tl.; ch.
Unai;	7–0	Buhari;	1–0;	Wed.	Buhari;	1–0	w.	
Udwada;	2–0	Udwada;	2–0;	Tue.	Local;		w.,sv.	2sl(pr. h).; fr (An. Sud. 8).; 13tl.; mq.; 2dg. dp.; Jain Apasara; Ruins of Peshva's ort.
Pardi;	2–0	Bulsar;	6–0;	Sat.	Parnera;	4–0	w.,t.	sl(pr).; 4tl.
Tantichaiya;	0–1	Chalthan;	3–4;		Chalthan;	3–0	w.	sl(pr).; pyt.; cs.(c.);3tl.; dg.; dh.; cs.; lib.
Bulsar;	17–0	Khergam;	2–0;		Khergam;	1–0	w.	xl(pr).; pyt.; fr (Ans. Sud. 8).; tl.
Madhi;	10–4	Valod;	1–4;	Fri.	Valod;	1–2	w.,rv.	
Pardi;	16–0	Mandava;	6–0;	Fri.	Chiwal;	2–0	w.,p., rv.	sl(pr).; cs.(mp.); tl.
Madhi;	3–0	Surali;	4–0;	Thu.	Local;		rv.	sl(pr).; pyt.; cs.(mp.); ch.; lib.
Pardi;	2–4	Sukhlav;	2–4;	Fri.	Pardi;	1-4	w.	sl(pr).; pyt.; cs. (c.); gym.; ch.
Surat;	8–0	Surat;	8–0;	Sat.	Talad;	1–0	w.	tl.
Medhi;	18–0	Pipalwada;	2–0;	Sat.	Mandvi;	10–0	w.	
Zankhvav;	5–0	Zankhvav;	5–0;		Zankhvav;	5–0	w.	
Songadh;	4–0	Songadh;	4–0;	Sat.	Songadh;	4–0	w.	
....		....			...........deserted		....	....
Vyara;	7–0	Local;		Mon.	Bamnamal-najik;	4–0	w.	2sl(2pr).; pyt.; fr (Shivratri; Mg. Vad. 13).; tl (Mahadev).

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150	Balasār BLR.; વલસાડ	Taluka Headquarters	4.0; 29759; 5920; 1449	Local;
			4	
151	Balēśawar PLS,; બલેશ્વર	N; 1-4	2.1; 2532; 506; 200	Local;
			7	
152	Balethī MDR,; બલેઠી	S; 12-0	3.2; 571; 98; 546	Zankhvav; 2-0
153	Balīṭhā PRD.; બલીઠા	N; 8-0	1.6; 1035; 201; 746	Vapi; 2 0
154	Bāmaṇa-Karavaḍ PRD.; બામણ-કરવડ	16-0	2.6; 686; 16; 68	Vapi; 5-0
			2	
155	Bāmaṇāmāludūr VRA.; બામણામાલદૂર	SW; 20-0	1.0; 964; 147; 96	Buhari; 2-4
			4	
156	Bāmaṇāmālanajīk VRA.; બ ામણ માલનજી ;	S; 9-0	0.5; 165; 34; 12	Buhari; 5-0
			8	
157	Bāmanawāḍā CKL બામનવાડા	E; 4-0	1.3; 498; 488; 492	Amadhara; 1-0
158	Bāmaṇawel CKL.; બામણવેલ	E; 3-0	3.4; 1750; 350; 134	Local;
159	Bāmaṇavel DRP.; બામણવેલ	S; 35-0	1.8; 264; 43; 264	Dharampur; 35-0
160	Bāmaṇi BRD.; બામણી	NE; 7-0	0.9; 1024; 218; 861	Kadod; 1-4
161	Bāmaniā MKW બામણીઆ	SE; 6-0	1 3; 581; 85; 569	Jervavla; 2-0
152	Bamarolī BRD; બમરોલી	S; 3-0	1.1; 160; 39; 159	Bardoli; 3-0
163	Bamarolī CKL.; બમરોલી	S; 5-0	1.1; 578; 132; 560	Bhestan; 2-0
164	Bāmaṭī DRM.; બામટી	N; 3-0	2 1; 1596; 226; 1514	Dharampur; 3-0
165	Bandhārapāḍā-Motā SGD.; બંધારપાડા મોટા	S; 8-0	1 3; 345; 60; 436	Songadh; 8-0
166	Bānsadā YNS.; વાંસદા	Taluka Headquarters	2 3; 4455; 1124; 1627	Local;
169	Barabodhan OPD.; બરબોધન	SW; 13-1	5.5; 1349; 300; 380	Local;
168	Baraḍī MGL,; બરડી	E; 25-0	0.2; 56; 9; 56	Umerpada; 3-0
169	Baraḍīpāḍā MGL બરડીપાડા	E; 45-0	1.2; 167; 24; 167	Umerpada; 12-0
170	Baradipada VRA. બરડીપાડા	S.E; 14-0	2.3; 457; 88; 452	Dolvan; 7-0

Railway St.; Distance.	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance.	Drinking water facilities	Institutions and other information.
6	6	7	8	9
Local;	Local;	Local;	pl.,t.	13sl (8pr.; 2m.; 3h).; mun.; 2cs. (2c.); 3fr (Srn.Sud.15, An.Sud.8, An.Sud.10).; 7tl.; M; 5mq.; 5dg.; 3dh.; gym.; ch.; 4lib.; 4dp.; 2cch.
Chalthan; 3-4	Local;	Local;	w.,rv.	2sl (2pr).; pyt.; cs. (c).; 2tl.; mq.; 6dg.; ch., 2lib.; dp.
Zankhvav; 2-0	Devgadh; 3-0; Thu.	Local;	w.	Sl(m).; cs.; ch.
Vapi; 2-0	Vapi; 2-0;	Local;	c.	Sl (pr).; pyt.; dg.
Vapi; 5-0	Chhipha-dkachh; 4-0; Sun.	Chanod; 1-0	w.	Sl (pr).
Unai; 5-0	Buhari; 2-4; Wed.	Buhari; 3-0	w.	sl (pr).; pyt.; cs.; lib.
Vyara; 9-0	Buhari; 5-0; Wed.	Local;	w.	tl (Mahadev).
Bilimora, 11-0	Local; Mon.	Khambhada; 1-0	w.	2sl (pr.; lokshala).
Bilimora; 9-0	Chikhali; 5-0;	Local;		2sl (2pr).; pyt.; tl.; mq.; dg.; dp.; cch.
Bulsar; 53-0	Sildha; 3-0; Sat.	Dharampur; 35-0	p.	
Madhi; 2-9	Surali; 3-0; Thu.	Local;	w., p.	sl (pr).; py.; tl.
Bardoli; 14-0	Karvan; 4-0; Sat.	Local (except monsoon); 0-4 Vanskui;	w.	sl (pr).; cs. (fmg.).
Bardoli; 3-0	Bardoli; 3-0; Sat.	Afwa; 1-0	w.	sl (pr).; ch.
Bhestan; 2-4	Surat; 3-0; Sat.	Bhestan; 3-0	w., p.	sl (pr). 3tl.; 3dg.
Bulsar; 18-0	Vadpada; 3-0; Tue.	Dharampur; 3-0	w., rv.	sl (pr).; pyt.
Doswada; 4-0	Local; Mon.	Songadh; 8-0	w.	pyt.; fr (Vsk Sud 15).; tl.; dg.; ch.
Unai; 7-0	Local; Fri.	Local;	w., p.	3sl (2pr).; (h).; pyt. 5cs. (5c.); 10tl.; mq.; 3dg.; dh; ch,; lib,; 4dp.
Surat; 8-0	Surat; 8-0; Sat.	Local;	w., p.	sl (pr).; pyt.; cs. (mp.); tl.; mq.; 2dg.; ch.; lib.
Umerpada; 3-0	Umerpada; 3-0;		w.	
Umerpada; 12-0	Umerpada; 12-0;		w.	cs. (c.).
Sara; 7-0	Panchol; 7-0; Fri.	Dolvan; 8-0	w.	sl (lokshala).

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171	Bāraḍolī BRD.; બારડોલી	Headquarters	2.8; 9846; 2180; 2508	Local;
172	Barai PRD.; બરઈ	SE; 8-0	1.2; 622; 113; 613	Pardi; 3-0
173	Baramāḍā VRA.; બરમાડા	SE; 18-0	...deserted...	...Village...
174	Bārapuḍā DRP.; બારપુડા	SE; 31-0	0.3; 450; 92; 444	Dharampur; 31-0
175	Bāratāḍ B.NS; બારતાડ	SW; 19-0	5.4; 1289; 263; 1288	Bansda; 18-0
176	Bāratāḍ (Unāī) BNS.; બારતાડ (ઉનાઈ)	N; 7-0	1 9, 701; 113; 701	Unai; 0-4
177	Bāratāḍ MHW.; બારતાડ	SW; 4-6	2 3; 924; 173; 903	Karchelia; 1-0
178	Bārasaḍī PLN.; બારસડી	SE; 8-0	1 0; 650; 87; 593	Gangadhra; 3-0
179	Bārasol DRP.; બારસોલ	NE; 3-0	1 7; 843, 133; 836	Dharampur; 3-0
180	Bārolīā CKL.; બારોલીઆ	N, 7-4	1.8; 582; 121; 576	Chasa; 2-0
181	Bārolīā DRP.; બારોલિયા	S; 2-0	3.6; 1210; 228; 1199	Dharampur; 2-0
182	Barūmāl DRP.; બરૂમાલ	E; 4-0	2 6; 862; 149; 813	Bilpudi; 2-0
183	Bāvalī SGD.; બાવલી	N; 8-0	0 9; 367; 57; 329	Songadh; 8-0
184	Beḍacīt VRA.; બેડચીત	SE; 13-0	1.0; 692; 124; 691	Buhari; 1-4
185	Beḍadhā MDV.; બેડધા	NE; 5-0	1.1; 344; 57; 344	Mandvi; 5-0
186	Beḍakuwā VLD.; બેડકુવા	N; 10-0	3.2; 1340; 257; 1272	Kiher; 3-0
187	Beḍakuvā (dūr) VRA.; બેડ કુવા (દૂર)	N; 12-0	3 5; 1476; 223; 1453	Vyara; 12-0
188	Beḍakuvā (Najik) VRA.; બેડ કુવા (નજીક)	NE; 2-0	1.8; 258; 55; 255	Vyara; 2-4
189	Beḍapāḍā BNS.; બેડમાળ	S; 11-0	3.3; 378; 82; 378	Bansda; 15-0
190	Bēḍapāḍā SGD.; બેડપાડા	S; 7-0	1.4; 162; 25; 162	Songadh; 7-0
191	Beḍavāṇakhaḍakā SGD.; બેડવાણખડકા	W; 1-0	0.9; 148; 23; 148	Songadh; 1-0
192	Beḍavāṇaumaradā SGD.; બેડવાણઉમરદા	SW; 8-0	1.7; 159; 25; 159	Songadh; 8-0

Railway St.; Distance.	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance.	Drinking water facilities	Institutions and other information.
5	6	7	8	9
Local;		Local;	w.; rv.	3sl (2pr, h).; mun.; 2cs. (2c.); fr (An Sud 10); 7tl.; 2mq.; 7dg.; ch.; 41 ib.; 5dp. Well-known place where the historical Bardoli Satyagraha led by Sardar Vallabhbhai Patel took place.
Pardi; 4–4	Sukhlav; 0–4; Fri.	Rohina; 1–0	w.	sl (pr).; tl.
....	....	.. ...deserted	....	....
Bulsar; 49–0	Nan Vahiyal; 19–0; Thu.	Penth; 9–0	p.	
Unai; 26–0	Anklach; 2–0; Sat.	Dharampur; 9–0	w., rv. str.	sl (pr).
Unai; 0–4	Unai; 0–4; Tue.	Unai; 2–0	w., rv.	2sl (pr.; lokshala.)
Bardoli; 11–0	Karchelia; 1–0, Tue.	Karchelia; 0–6	w.	sl (pr).; pyt.; ch.
Gangadhra; 3–0	Bardoli; 3–0;	Bardoli; 3–0	w.	sl (pr).; pyt.; tl.; lib.
Bulsar; 18–0	Dharampur; 3–0; Mon.	Vankal; 3–0	w.	sl (pr).; pyt.
Chikhali; 4–0	Chikhali; 7–0;	Duwada; 1–4	w., rv.	2sl (2pr).; fr (Kt Sud 14).; tl.; mq.; dg.; lib.
Bulsar; 17–0	Dharampur; 2–0; Mon.	Dharampur; 2-0	w.	sl(pr).
Bulsar; 22–0	Ukta; 3–0; Sun.	Dharampur; 4-0	rv.	sl(pr).;ch.
Songadh; 8–0	Songadh; 8–0; Sun.	Songadh; 8–0	w.	sl(pr).; pyt; cs.(c.).; ch.
Unai; 7–0	Buhari; 1–4; Wed	Local;	w, rv.	sl(pr).; pyt.; cs.
Madhi; 15–0	Mandvi; 5–0; Wed.	Mandvi; 5–0	w.	
Kiher; 3–0	Loterva; 2–4;	Balada; 0–4	w.	sl(pr).; pyt.
Vyara; 12–0	Khodtalav; 1–0; Fri.	Kanja; 2–0	w.	sl(pr).; pyt.; tl.; lib.
Vyara; 2–4	Vyara; 2–4; Sat.	Vyara; 2–4	w.	sl(lokshala).; pyt.
Unai; 22–0	Anklach; 1–0; Sat. Tue.	Bansda; 11–0	w., rv., str.	
Doswada; 4–0	Bandhapada Mota; 0–2; Mon.	Songadh; 7–0	w.	
Songadh; 1–0	Songadh; 1–0; Sun.	Songadh; 1–0	w.	cs. (c.); ch.
Songadh; 8–0	Songadh; 8–0; Sun.	Songadh; 8–0	w.	pyt.

Sr, No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati; 1	Direction; Traveiling distance. from Taluka peta H. Q. 2	Area (Sq. miles.); Population Households; Agricultural Popuation. 3	Post office; Distance. in miles. 4
193	Beḍawāṇ SGD.; બેડવાણ	N; 12–0	1.6; 181; 35; 181	Songadh; 12-0
194	Beḍī SGD.; બેડી	NW; 10–4	1.5; 401; 62; 401	Songadh; 10-4
195	Behaḍārāipurā VRA.; બેહડારાઈપુરા	SW; 17–0	4.0; 1489; 262; 1405	Buhari; 3-0
196	Beladhā VLD.; બેલધા	NE; 5-4	0.8; 132; 26; 131	Syadala; 1-0
197	Besanīā VRA.; બેસનીઆ	S; 20–0	4.5; 510; 86; 506	Buhari; 2-0
198	Beṭ CRS.; બેટ	5–0	... ... deserted ...	...
199	Bhāḍā KMJ.; ભાદા	W; 4–0	1.8; 586; 107; 550	Varachhali; 4-0
200	Bhaḍakuvā MGL.; ભડકુવા	SW; 5–4	1.2; 387; 59; 340	Wankal; 4-0
201	Bhadelī-Desāī-Pārī BLR.; ભદેલી-દેસાઈ-પારી	N; 3–0	0.9; 602; 117; 230	Local;
202	Bhadelī-Jagālālā BLR.; ભદેલી-જગાલાલા	NW; 5–0	4.1; 4929; 828; 347	Local;
203	Bhādoḷ OPD., ભાદોળ	S; 6–0	3.0; 679; 150; 621	Kim; 8-0
204	Bhāgaḍāvaḍā BLR.; ભાગડાવડા	NW; 2–0	2.9; 1913; 378; 599	Bulsar; 1-0
205	Bhāgal BLR.; ભાગલ	N; 11–0	7.3; 1405; 257; 977	Untdi; 4-0
206	Bhagawā OPD.; ભગવા	W, 8–0	31.0, 4585; 1361; 118;	Local;
207	Bhairavī CKL.; ભૈરવી	S; 12–0	2.0; 978; 153; 978	Khergam; 3-0
208	Bhamaiyā BRD.; ભામૈયા	E; 8–0	1.5; 506; 102; 473	Kadod; 2-4
209	Bhāṁbhā DRP.; ભાંભા	NE; 5–0	1.4; 625; 99; 625	Dharampur; 5-0
210	Bhāṇapur SGD.; ભાણપુર	NE; 15–0	0.3; 126; 21; 126	Songadh; 15-0
211	Bhānavāḍ DRP.; ભાણવાડ	E; 16–0	2.6; 161; 132; 161	Dharampur; 16-0
212	Bhāṇavāḍī VRA.; ભાણવાડી	NW; 2–4	2.0; 523; 96; 510	Vyara; 2-4
213	Bhaṇḍār-Kāch DRP.; ભંડારકાછ	N; 15–0	2.1; 376; 77; 376	Sukhala; 7-0
214	Bhāṇḍut OPD.; ભાંડુત	SW; 7–3	2.3; 697; 144; 626	Pinjrat; 1-4
215	Bhāṇodrā CRS.; ભાણોદ્રા	S; 7–0	1.1; 167; 35; 142	Eklera; 3-5
216	Bharāḍadā SGD.; ભરાડદા	S; 12–0	1.6; 363; 60; 358	Songadh; 12-0
217	Bharamapor BRD.; ભરમપોર	N; 7–0	1.0; 215; 46; 190	Pardi-Kadod; 1-4
218	Bharathāṇa (Kosāḍ) CRS.; ભરથાણા (કોસાડ)	NE; 6–4	1.7; 534; 106; 507	Kosad; 1-0
219	Bharathāṇā (Vēsu) CRS.; ભરથાણા (વેસુ)	SW; 4–6	0.8; 598; 123; 523	Vesu; 1-0
220	Bhārūṇḍī OPD.; ભારૂંડી	E; 12–0	2.1; 341; 71; 286	Syadla; 2-0

Railway St., Distance. 5		Weekly Bazar; Distance; Bazar Day. 6		Motor Stand; Distance. 7		Drinking water facilities 8	Institutions and other information. 9
Songadh;	12–0	Songadh;	12–0 Sun.	Songadh;	12–0	w.	
Vyara;	4–4	Songadh;	10–4; Sun.	Vyara;	6–0	w.	sl(lokshala).; pyt.
Anaval;	7–0	Buhari;	3–0; Wed.	Local;		w.	2sl(2pr).; pyt.; cs.;(c).; tl.; lib.
Madhi;	1–0	Surali;	1–0; Thu.	Syadala;	1–4	w.	sl(pr).; pyt.
Sara;	6–0	Buhari;	2–0; Wed.	Dolvan;	8–0	w.	sl(lokshala).; pyt.
Surat;	3–0	....	....	deserted............		....	....
Wankal;	4–0	Surat;	3–0; Sat.	Kholvad ;	1–4	w.,rv.	sl(pr).; pyt.; 2tl.; 2dg;. ch.
Bulsar;	3–0	Wankal;	4–0; Fri.	Mangrol;	5–4	w.	sl(lokshala).; pyt:; cs. (c).; tl.
Bulsar;	4–0	Bulsar;	3–0;	Bulsar;	3–0	w.	sl(pr).;2tl.;dh;lib.;dp.
Kim;	8–0	Bulsar;	4–0;	Bulsar;	3–0	w.	sl(pr).; pyt.; fr(An Sud 8) 2tl;dg.
Bulsar;	1–0	Surat;	19–0; Sat.	Local;		w.	sl(pr).; pyt.;3tl.; M.; dg.
Dungri;	5–4	Bulsar;	1–0;	Bulsar;	1–0	w.,t.	2sl(2pr).; pyt.; 4tl.; dh.
Sayan;	16–0	Bulsar;	6–0;	Dungri;	6–0	w.	2sl(2pr).; pyt.; fr.; ch.; lib.
Bulsar;	14–0	Surat;	19–0; Sat.	Local;		w.,p.	2sl(2pr).; pyt.; tl.; mq.; 2dg.; ch.; lib.
Timberva;	4–0	Khergam;	3–0;	Khergam;	3–0	w.,rv.	sl(pr).
Bulsar ;	20–0	Kadod;	2–4; Sun.	Local;		w.	sl(pr).; pyt.; tl; lib.
		Vadpada;	2–0 Tue.	Vankal;	3–0	w.,rv.	sl(pr).
Vyara;	10–0	Satkul;	3–0; Fri.	Songadh;	15–0	w.	
Bulsar;	34–0	Ukta ;	8–0; Sun.	Dharampur;	16–0	p.	
Vyara;	2–4	Vyara;	2–4 Sat.	Vyara;	2–4	w.	sl (Lokshala).; pyt..; cs
Vapi;	19–0	Sukhala;	7–0; Fri.	Pondha;	5–0	w.;rv.	sl (pr).
Surat;	16–0	Surat;	16–0; Sat.	Dihen;	2–0	w.;p.	sl (Pr); fr (Srn-3rd Monday) Raghu Rudra.; 6tl;.; dp.
Bhestan;	1–4	Surat;	10–0; Sat.	Sachin;	1–4	w.	mq.
Songadh;	12–0	Songadh;	12–0; Sun.	Songadh;	12–0	w.r.	sl (lokshala).; pyt.
Timberva;	3–0				1–0	w.	sl(pr).; pyt.
Utran;	3–0	Surat;	6–0; Sat.			w.	sl (pr).; pyt.; cs. (c).; tl.; ch.; lib.
Surat ;	5–0	Surat;	5–0; Sat.	Surat;	5–0	w.	sl: (pr).; pyt.; tl.; ch.
Sayan;	4–0	Surat;	12–0; Sat.	Sayan;	3–0	w.	sl (Lokshala); (s.ce); tl.

Sr. No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati; 1	Direction; Travelling distance from Taluka/peta Hq. 2	Area (Sq. miles.); Population Households; Agricultural Population. 3	Post office; Distance in miles. 4
221	Bhaṭagām OPD. ભટગામ	S; 3–4	1.6; 703; 101; 503	Olpad; 3-0
222	Bhaṭāi NVR. ભટાઈ	E; 5–0	0.6; 563; 126; 472	Sisodra; 3-0
223	Bhāṭakaravaḍ PRD. ભાટ-કરવડ	N; 15–0	2.1; 805; 174; 728	Vapi; 5-0
224	Bhaṭalāi CRS. ભટલાઈ	W; 14–0	1.0; 446; 105; 441	Damka; 1-0
225	Bhātakhāi MDV. ભાતખાઈ	NE; 4–0	1.0; 175; 26; 174	Mandvi; 4-0
226	Bhāṭakol MGL. ભાટકોલ	SW; 14–0	0.6; 272; 51; 245	Kim; 3-0
227	Bhāṭapur VRA. ભાટપુર	W; 1–4	0.5; 348; 66; 343	Vyara; 1-4
228	Bhaṭār CRS. ભટાર	SW; 4–0	0.9; 227; 50; 204	Surat; 2-4
229	Bhaṭawāḍā SGD. ભટવાડા	N; 12–0	0.9; 315; 42; 301	Songadh; 12-0
230	Bhāṭhā CRS. ભાઠા	SW; 5–0	4.4; 3148; 737; 2029	Local;
231	Bhāṭhā GND. ભાઠા	W; 6–0	1.2; 1480; 328; 670	Lushwada; 2-0
232	Bhāṭhā NVR. ભાઠા	W; 15–0	5.8; 643; 160; 618	Maroli; 8-0
233	Bhāṭherī DRP. ભાઠેરી	S; 51–0	1.0; 158; 30; 158	Dharampur; 51-0
234	Bhāṭīā CRS. ભાટીઆ	SE; 11–0	1.8; 440; 98; 390	Sachin; 4-0
235	Bhavāḍā DRP. ભવાડા	SE; 27–0	8.5; 393; 81; 393	Dharampur; 27-0
236	Bhavaṭhāṇ-Aṁbosī DRP. ભવઠાણ-આંબોસી	E; 20–0	8.5; 564; 109; 564	Dharampur; 20-0
237	Bhavaṭhāṇ-Jaṅgal DRP. ભવઠાણ-જંગલ	E; 30–0	1.1; 12; 2; 12	Dharampur; 30-0
238	Bhawāḍā (Jāgīr) DRP. ભવાડા (જાગીર)	NE; 14–0	3.5; 360; 58; 360	Dharampur; 14-0
239	Bheḍawād CRS. ભેડવાદ	S; 3–0	......................deserted	village ....
240	Bhensadarā DRP. ભેંસદરા	SE; 5–0	3.6; 1037; 171; 988	Dharampur; 5-0
241	Bhensī MDV.; ભેંસી	N; 15–0	3.6; ....deserted ...	....
242	Bhensudalā BRD.; ભેંસુદલા	NE; 10–4	1.2; 468; 92; 455	Madhi; 1-0
243	Bherav KMJ.; ભેરવ	N; 1–0	1.6; 433; 91; 422	Kamrej; 1-0
244	Bhesāṇ CRS.; ભેસાણ	W; 5–2	2.2; 688; 116; 568	Local;
245	Bhestān CRS.; ભેસ્તાન	S; 5–0	3.0; 1196; 222; 792	Local;
246	Bhīlavāḍā MGL.; ભીલવાડા	E; 40–0	3.1; 1097; 184; 1013	Wankel; 5-0
247	Bhīmapor CRS.; ભીમપોર	SW; 10–2	2.5; 3190; 721; 250	Local;
248	Bhīmapor VLD.; ભીમપોર	S; 2–3	1.0; 529; 96; 488	Local;
249	Bhīmapurā SGD.; ભીમપુરા	N; 3–0	1.6; 209; 39; 209	Songadh; 3-0
250	Bhīmarāḍ CRS.; ભીમરાડ	SW; 6–0	3.0; 479; 102; 436	Khajod; 1-0
251	Bhīnār BNS.; ભીનાર	N; 4–0	4.0; 2148; 369; 2094	Unai; 2-0

Railway St.; Distance. 5		Weekly Bazar; Distance. Bazar Day. 6		Motor Stand; Distance. 7		Drinking water facilities 8	Institutions and other information. 9
Sayan;	12–0	Surat;	15–0; Sat.	Olpad;	3–0	w.;p.	sl (pr).; fr (Ct. Sud 9).; 2tl.; dh.; ch.; lib.
Navsari;	4–4	Navsari;	4–0; Sun.	Local;		w.	sl (pr).; mq.; 2dg.; lib;,
Vapi;	5–0	Chhibhadkachh;	4–0; Sun	Chanod;	1–0	w.;v.	sl (pr).
Surat;	14–0	Surat;	14–0; Sat.	Local;		w.	sl (pr).
Madhi;	14–0	Mandvi;	4–0; Wed.	Badtal;	2–0	w.	
Kim;	3–0	Kim;	3–0;	Local;		w.	mq.; dg.
Vyara;	1–4	Vyara;	1–4; Sat.	Vyara;	1–4	w.	pyt.; cs. (mp).
Surat;	2-4	Surat;	2-4; Sat.	Surat;	2-4	w.	3tl.
Songadh;	12–0	Songadh;	12–0; Sun.	Mandvi;	13–0	w.	sl (pr).; pyt.
Surat;	5–0	Surat;	5–0; Sat.	Local;		w.	sl (pr).; pyt.; cs. (Milk. Sale); 3tl.; 5dh.; 2lib.; 2dp.
Amalsad;	3–0	Billimora;	2–0;	Biliomora;	2–0	w.	sl (pr).; pyt.; cs. (c); tl.; mq.; dg.; ch.; lib.
Maroli;	8–0	Maroli;	8–0;	Parsoli;	2–0	w.	pyt.; tl.; ch.; lib.
Bulsar;	69–0	Ozar;	7–0; Thu.	Dharampur;	51–0	rv.;n.	
Sachin;	4–0	Surat;	13–0; Sat.	Lajpur;	4–0	w.	sl (pr);; pyt.; tl.; mq.; dg.; dh.; ch.
Bulsar ;	50–0	Bopi;	5–0; Fri.	Dharampur,	27–0	rv.	
Bulsar;	38–0	Bopi;	7–0; Fri.	Dharampur;	18–0	rv.;p.	
Bulsar;	48–0						
Bulsar;	35–0	Nani Vahiyal;	12–0; Thu.	Dharampur;	14–0	p.;rv.	
....		....		deserted		....	....
Bulsar;	24–0	Nani Vahiyal;	3–0 Thu	Dharampur;;	5–0	w.;rv.	sl (pr); pyt; cs. (mp).
....		....		Sathvav;	10–0	o.	
Madhi;	1–0	Surali;	2–0; Thu	Local;		w.	sl(pr).; cs. (mis.).
Sayan;	6–0	Surat;	10–0; Sat.	Kamrej;	10–0	rv.,w.	sl(pr).; pyt.; dh.; lib.
Surat;	6–0	Surat;	5–0; Sat.	Local;		w.,p.	sl(pr).; 2tl.; dg.; ch.
Local;		Surat;	6–0; Sat.	Local;		w.,p.	sl(pr).; cs.; 2tl.; ch.; dp.
Wankel;	5–0	Wankel;	5–0; Fri.	Mangrol;	5–0	w.	pyt.; 2cs. (c.; women's uplift).; tl.
Surat;	10–0	Surat;	9–0; Sat.	Local;		w.,p.	sl(pr).; pyt.; 2cs. (mp., Khadi).; fr (Bdp Sud 14).; 13tl.; dg.;dp.
Madhi;	16–0	Local;	Wed.	Buhari;	2–4	w.,rv.	sl(pr).; pyt.
Songadh;	3–0	Songadh;	3–0; Sun.	Songadh;	2–4	w.	
Surat;	5–0	Surat;	5–0; Sat.			w.	sl(pr).; cs.; 3tl.
Unai;	2–0	Unai;	2–0; Tue.	Local;		w.	sl(pr).; cs. (c.).; 2tl.; ch.

Serial No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati; (1)	Direction; Travelling distance. from taluka peta H. Q. (2)		Area (Sq. ms.); Population Households; Agricultural Population. (3)				Post office; Distance in miles (4)	
252	Bhīnār NVR.; ભીનાર	E;	8–0	9.1;	1085;	252;	1020	Mangrol;	2-0
253	Bhojapur (Dūr) VRA.; ભોજપુર (દૂર)	SE;	11–0	0.5;	167;	32;	162	Buari;	3-0
254	Bhojapur (Najīk) VRA.; ભોજપુર (નજીક)	SW;	3–0	2.0;	467;	71;	462	Kapura;	1-0
255	Bhomā pāraḍī BLR.; ભોમા પારડી	E;	8–6	0.8;	414;	91;	304	Ronvel;	0-4
256	Bhorathavā SGD.; ભોરથવા	S;	34–0	1.3;	159;	26;	159	Navapur;	18-0
257	Bhoriā MHW.; ભોરીઆ	SW;	9–4	3.4;	601;	130;	598	Mahuwa;	8-0
258	Bhunavāḍī NVR.; ભુનવાડી	SE;	12–0	0.4;	51;	11;	43	Satem;	2-4
259	Bhurawaḍ DRP.; ભુરવડ	S;	45–0	1.7;	233;	48;	233	Dharampur;	45-0
260	Bhūrīvel SGD.; ભૂરીવેલ	N;	4–0	0.6;	43;	8;	43	Songadh;	4-0
261	Bhūrīvel VRA.; ભુરીવેલ	E;	11–0	0.5;	50;	9;	50	Vyara;	11-0
262	Bhutapor PLN.; ભુતપોર	E;	1–0	2.0;	244;	61;	220	Baleshwar;	2-0
263	Bhutarūṇ DRP.; ભુતરૂણ	E;	33–0	1.0;	38;	13;	38	Dharampur;	33-0
264	Bhutasāḍ NVR.; ભુતસાડ	SW;	6–3	1.0;	375;	75;	298	Att;	2-0
265	Bhutasar BLR.; ભુતસર	E;	11–0	1.7;	851;	152;	701	Ronwel;	2-0
266	Bhuwāsaṇ BRD.; ભુવાસણ	S;	7–0	0 6;	512;	92;	497	Sarban;	1-0
267	Bigārī CND.; બીગરી	W;	10–0	4.9;	5303;	1003;	2884	Local;	
268	Bījalawāḍī MGL.; બીજલવાડી	E;	19–0	0.4;	128;	18;	115	Umerpada;	5-0
269	Biladhā DRP.; બીલધા	E;	28–0	2.4;	328;	64;	328	Dharampur;	25-0
270	Bilakhaḍī MHW.; બીલખડી	SW;	5–0	1.2;	795;	146;	777	Karchalia;	3-0
251	Bilamoḍā BNS.; બીલમોડા	E;	7–0	0.6;	125;	28;	125	Bansda;	6-0
272	Bilapuḍī DRP.; બીલપુડી	E;	3–0	5.9;	3046;	548;	2979	Local;	
273	Bilia DRP.; બીલીઆ	SE;	25–0	0 7;	54;	11;	54	Dharampur;	25-0
274	Bilimorā GND.; બીલીમોરા	W;	3–4	13.5;	20154;	3962;	222	Local;	
275	Biloniā DRP.; બીલોનીઆ	S;	23–0	2.1;	35;	6;	35	Dharampur;	23-0
276	Bilavaṇ MGL.; બીલવાણ	E;	40–0	2.7;	412;	60;	412	Umerpada;	10-0
277	Bīnavāḍā BLR; બીનવાડા	NE;	7–4	2.3;	1124;	225;	385	Chanvai;	1-4
278	Bīrabarā VRA.; બીરબરા	SE;	17–0	2.0;	25;	6;	25	Vyara;	17-0
279	Birāmā MDV.; બિરામા	E;	3–0	0.4;	..	deserted	...	Tarsada;	2-0
280	Boḍalāi BLR.; બોડલાઈ	E;	10–3	1.4;	539;	96;	413	Ronvel;	1-0
281	Bodālī NVR.; બોદાલી	W;	4–0	3.4;	2623;	624;	969	Local;	
282	Boḍawāṅk CKL.; બોડવાંક	NE;	12–0	2.6;	1020;	195;	1003	Jogwad;	1-4

Railway St.; Distance in miles.	Weekly Bazar; Distance. Bazar Day.	Motor Stand; Distance.	Drinking water facilities	Institutions and other information.
5	6	7	8	9
Maroli; 6-0	Maroli 5-0;	Mangrol 2-0	w.	pyt.; 3tl.; ch.; lib.
Unai; 6-0	Panchol 2-0; Fri	Local		pyt.
Vyara; 4-0	Vyara 3-0; Sat	Kapura 2-0	w.	sl(pr).; pyt.
Bulsar; 8-4	Navera 2-0; Sun	Local	w.	tl.
Navapur; 18-0	Singana 8-0; Tue	Navapur 18-0	w.,rv.	
Anaval; 9-0	Valwada 2-0; Sun.	Vank 1-4	w.	sl(pr).; pyt.; mq.; dg.; lib.
Navsari; 6-0	Navsari 6-0; Sun.	Sotam 3-0	w.	
Bulsar; 63-0	Ozar 10-0; Thu.	Dharampur 45-0	rv.,n.	
Songadh; 4-0	Songadh 4-0; Sun.	Songadh 4-0	w.	
Vyara; 11-0	Balpur 6-0; Mon.	Vyara 11-0	w.	pyt.
Chalthan; 6-0	Palsana 2-0;	Palsana 1-0	w.	pyt.
Bulsar; 50-0	Nani Vahiyal 20-0; Thu.	Dharampur 33-0	rv.	
Navsari; 4-0	Navsari 5-0; Sun.	Local	w.	sl(lokshala).; tl.; dh.
Bulsar; 10-0	Navera 3-0; Sun.	0-4	w.	2sl(2pr).
Bardoli; 7-0	Mahuwa 7-0; Mon.	Local	w.	sl(pr).
Bilimora; 4-0	Bilimora 5-0,	Bilimora 4-0	w	4sl(4pr).; pyt.; cs.(c).; fr (An Sud 8).; 5tl.; dg.; 3dp.
Keori; 2-0	Keori 2-0;	Keori 2-0		
Bulsar; 44-0	Umarthana 2-0;	Dharampur 28-0	w.,rv.,	p. sl(pr).
Bardoli; 13-0	Karchalia 3-0; Tue.	Fulwadi 2-0	w.	sl(pr); lib.
Vaghai; 6-0	Khambhala 2-0; Tue.	Bansda; 7-0	w.,rv.	
Bulsar; 22-0	Dharampur 3-0, Mon	Dharampur 3-0	w.,rv.	2sl(2pr).; pyt.; tl.
Bulsar; 44-0	Umarthana 2-0; Sun.	Chival; 24-0	rv.	
Local;	Local	Local,	w.	9sl(7pr; 2h).; mun.; fr; (An Sud 2).; 6tl.; 2mq.; 2dg.; dh.; gym.; ch.; lib.; 11dp.
Pardi; 27-0	Mandava 17-0, Fri.	Nanapondha; 12-0 (Chival)	rv.,p.	......deserted.........
Umerpada; 10-0	Umerpada 10-0;		w.	sl (pr).; pyt ; cs.(c.).
Bulsar; 6-0	Navera 4-0; Sun.	Parnera; 2-0	w.,rv.	sl(pr).; pyt.
Vyara; 17-0	Balpur 7-0; Mon	Vyara; 17-0	w.	pyt.
Madhi; 10-0	Mandvi 3-0; Wed	Tarsalda; 2-0	w.,rv.	........deserted............
Bulsar; 10-0	Navsari 3-0; Sun.	Local;	w.	
Navsari; 3-0	Navsari 4-0; Sun.	Navasari; 3-0	w.	sl(pr).; pyt.; tl.; dh.
Rankuwa; 5-0	Kangwai 1-0; Fri	Tamkul; 2-0	w.	sl(pr).; pyt.; cs.(c.).

Serial No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati; 1	Direction; Travelling distance from taluka/peta H.Q. 2	Area (Sq. miles); Population; Households; Agricultural Population. 3	Post office; Distance in miles. 4
283	Bodhān MDV.; બોધાન	W; 14-0	5.6; 4017; 890; 1986	Local;
284	Boḍī-Śāṅwar SGD.; બોડી-શાંવર	S; 8-0	1.3; 152; 28; 105	Songadh; 8-0
285	Bokaḍadarā DRP.; બોકડ-દરા	E; 25-0	1.1; 102; 22; 102	Dharampur; 25-0
286	Bolāv OPD.; બોલાવ	N; 14-0	2.5; 463; 93; 453	Anita; 1-0
287	Boṇand CRS.; બોણંદ	E; 10-0	2.0; 726; 122; 548	Sachin; 4-0
288	Bopī DRP.; બોપી	NE; 16-0	4.4; 986; 225; 832	Dharampur; 16-0
289	Boradā SGD.; બોરદા	NE; 20-0	2.0; 685; 117; 634	Songadh; 20-0
290	Borakas VRA.; બોરકસ	S; 24-0	2.5; 292; 53; 279	Unai; 7-0
291	Borakhaḍī VRA.; બોરખડી	W; 7-0	5.5; 1833; 342; 1774	Kaher; 1-4
292	Borakuvā SGD.; બોરકુવા	S; 10-0	1.6; 264; 44; 264	Songadh; 10-0
293	Boralāi PRD.; બોરલાઈ	E; 2-4	0.1; 450; 82; 438	Pardi; 3-0
294	Borapāḍā DRP.; બોરપાડા	E; 35-0	0.9; 125; 27; 125	Dharampur; 35-0
295	Borapāḍā SGD.; બોરપાડા	S; 15-0	1.3; 304; 46; 298	Songadh; 15-0
296	Borasad MGL.; બોરસદ	S; 7-0	3.9; 1328; 213; 1021	Wankal; 9-0
297	Borasī NVR.; બોરસી	W; 22-4	3.1; 1408; 348; 247	Local;
298	Borī MDV.; બોરી	W; 6-2	1.8; 390; 76; 387	Mandvi; 5-0
299	Boriā MGL.; બોરીઆ	E; 6-0	1.5; 609; 86; 575	Wankal; 1-4
300	Boriā MHW.; બોરીઆ	E; 4-0	1.6; 815; 178; 666	Vankaner; 1-0
301	Boriāc NVR.; બોરીઆચ	SE; 10-4	1.1; 428; 84; 408	Astagam; 2-0
302	Boriāch BNS.; બોરીઆછ	S; 4-0	2.5; 842; 170; 831	Bansda; 3-0
303	Boridrā MGL.; બોરીદ્રા	W; 8-0	2.8; 651; 139; 351	Kosamba; 9-0
304	Borigālā MDV.; બોરીગાલા	E; 12-0	1.8; 400; 61; 398	Bodhan; 6-0
305	Budhalēśwar MHW.; બુધલેશ્વર	S; 0-2	0.6; 361; 73; 282	Mahuwa; 0-4
306	Buḍiā CRS.; બુડીઆ	S; 7-0	1.4; 1015; 213; 801	Bhestan; 2-4
307	Buhārī VLD.; બુહારી	S; 7-0	1.1; 2974; 582; 849	Local;
308	Bukal MDV.; બુકલ	...deserted ...	0.6; ....deserted ...	....
309	Buṇadhā MDV.; બુણધા	N; 13-0	1.7; 255; 49; 246	Zankhvav; 7-0
310	Bundhā SGD.; બુંધા	N; 8-0	1.5; 209; 36; 187	Songadh; 8-0
311	Buralā DRP.; બુરલા	SE; 20-0	2.2; 311; 59; 311	Dharampur; 20-0
312	Burawaḍ DRP.; બુરવડ	S; 25-0	3.5; 549; 112; 549	Dharampur; 25-0

Railway St.; Distance.		Weekly Bazar; Distance; Bazar Day.		Motor Stand; Distance.		Drinking water facilities	Institutions and other information.
5		6		7		8	9
Kim;	22-0	Local	Mon.	Local;		rv.,w.	4sl(3pr). (h).; pyt.; 2cs.; fr(Ct Sud 15).; 4tl.; 2mq.; 6dg.; 2dh.; 2gym.; ch.; 2lib.; 4dp.
Songadh;	8-0	Singpur	1-0; Mon.	Songadh;	8-0	rv.	sl(ashrama).; cs.(c.).
Bulsar;	40-0	Rajpuri Jungle	12-0; Thu.	Dharampur;	25-0	rv.,p.	sl(lokshala).
Kim:	3-0	Surat	18-0; Sat.	Local;		w.,rv. p.	sl(lokshala).; cs.; 2tl.
Sachin;	4-0	Surat	10-0; Sat.	Kharvasa;	1-0	w.	sl(pr).; cs. (Water Supply).; 3tl.; ch.; lib.
Bulsar;	35-0	Local	Fri.	Dharampur;	16-0	w.,rv.	pyt.
Songadh;	20-0	Songadh	20-0; Sun.	Sagbara;	8-0	w.	sl(pr).; pyt.; cs.; tl.
Kevdi Road;	2-0	Kharjai	2-0; Wed.	Unai;	7-0	w.,str.	
Kaher;	1-4	Bajipura	1-4; Sun.	Local;		w.	sl(pr).;pyt.;cs.(mp).;ch.
Songadh;	10-0	Bandharpada Mota	3-0; Mon.	Songadh;	10-0	w.	sl(pr).; tl.
Pardi;	4-4	Sukhlav	0-4, Fri.	Pardi;	2-4	w.	sl(pr).; pyt.
Bulsar;	49-0	Nani Vahiyal	19-0; Thu.	Dharampur;	35-0	rv.	sl(pr).
Songadh,	15-0	Umarda	1-0 Tue.	Songaah	12-0	w.,rv.	pyt.
Mangrol;	7-0	Mangrol	7-0;	Dungri;	1-4	w.	sl(pr).; pyt.; cs.; ch.
Maroli;	13-0	Maroli	13-0;	Ubhrat;	5-4	w.	sl(pr).; pyt.; cs.; tl.; lib.
Madhi;	12-0	Amba	1-4; Sat.		0-6	w,rv.	sl(lokshala).; dg.
Wankal;	1-4	Wankal	1-4; Fri.	Mangrol.	6-0	w.	sl(pr).; pyt.; ch.
Bardoli;	8-0	Mahuwa	5-0; Mon.	Local;		w.	13tl.; dg.; ch.
Navsari;	12-0	Gandevi;	3-0; Wed.	Local;		w.	sl (pr).; tl.
Unai;	10-0	Bansda.	3-0; Fri.	Bansda.	4-0	w.str. rv.	2sl (pr).; (lokshala).
Hathuran;	6-0	Kosamba;	9-0;	Mangrol;	6-0	w.	pyt; cs.; (c).; tl.; dg.
Kim.	18-0	Bodhan;	6-0; Mon.	Nangama;	2-0	w.	sl (lokshala).; ch.
Bardoli;	9-4	Mahuva;	0-4; Mon.	Mahuva;	0-2	w.	pyt.
Bhestan;	2-4	Surat;	6-4; Sat.	Bhestan.	3-4	w.	sl (pr).; cs. (mp).; tl.; ch.; lib.
Madhi;	16-0	Local;	Wed.	Local;		w.,rv.	2sl (2pr).; pyt.; fr (Mg. Sud 5 to Mg. Vad 4) 5th.; dg.; dh.; lib.; 2dp.;
......		......		deserted	......	...p......	Now merged with Tadkeshwar Village
Zankhvav;	7-0	Devgadh;	4-0; Thu.	Devgadh;	4-0	w.	sl (m).
Songadh;	8-0	Songadh;	8-0; Sun.	Songadh;	8-0	rv.,w.	
Bulsar;		Sildha;	5-0; Sat.	Nanapondha;	15-0	p.,rv.	
Bulsar;	53-0	Dodhani;	6-0; Fri.	Rakholi;	9-0	rv.,p.	sl (pr);

Serial No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati; 1	Direction; Travelling distance. from taluka/peta H. Q. 2		Area (Sq. miles.); Population Households; Agricultural Population. 3				Post office; Distance. in miles 4	
313	Buṭalāv NVR.; બુટલાવ	SE;	11–0	0.5;	208;	39;	144	Satem;	2-0
314	Buṭawāḍā MHW.; બુટવાડા	E;	9–4	2.1;	1241;	226;	1168	Anaval;	7-0
315	Buṭawāḍā VLD.; બુટવાડા	N;	1–4	2.3;	529;	102;	459	Valod;	1-4
316	Caḍhāv BNS.; ચઢાવ	N;	6–0	1.0;	590;	99;	539	Unai;	1-0
317	Caḍhavāṇ SGD.; ચઢવાણ	SE:	36–0	0.3;	147;	24;	144	Khandbara;	15-0
318	Cākadharā VRA.; ચાકધરા	E:	15–0	1.5;	182;	40;	165	Unai;	8-0
319	Cākaliā SGD.; ચાકલીઆ	W;	8–2	2.1:	457;	78;	434	Songadh;	7-0
320	Cakarā MGL.; ચકરા	E;	38–0	0.8;	174;	28;	174	Umerpada;	15-0
321	Cakavāṇ SGD.; ચકવાણ	SE;	6–4	0.9;	252;	43;	196	Songadh;	6-4
322	Calā PRD.; ચલા	SW:	10–2	2.0;	1712;	366;	917	Vapi;	2-4
323	Calathāṇ PLN; ચલથાણ	N;	7–5	1.0;	768;	157;	443	Local;	
324	Cāṁpāvāḍi SGD.; ચાંપાવાડી	S;	2–0	1.1;	234;	40;	184	Songadh;	2-0
325	Cāṁpāvāḍi VRA.; ચાંપાવાડી	N;	5–0	4.5;	874;	152;	855	Vyara;	5-0
326	Caṇāvāi BLR.; ચણાવાઈ	S;	7–0	3.4;	2005:	395;	1823	Local;	
327	Cāndapur MDV.; ચાંદપુર	E;	10–0	1.0;	20;	3;	20	Zankhvav;	17-0
328	Candāyur SGD.; ચંદાપુર	SE;	25–0	0.2;	139;	21;	130	Chinchpada;	7-0
329	Cāndaveṅgaṇ DRD.; ચાંદવેંગણ	S;	20–0	4.6;	636;	119;	636	Dharampur;	20-0
330	Cāndrāpaḍā MGL.; ચાંદ્રાપાડા	E;	24–0	0.3;	70;	12;	70	Umerpada;	0-4
331	Candor PRD; ચંડોર	S;	12–0	1.6;	650;	151;	447	Vapi;	1-4
332	Candravāsaṇa-Supā NVR.; ચંદ્રવાસણ-સુપા	SE:	6–4	1.3;	1048;	226;	886	Khedsupa;	2-0
333	Caṇod PRD.; ચણોદ	N;	13–0	2.0;	799;	149;	778	Vapi;	3-0
334	Cāpaladharā BNS.; ચાપલધારા	NW;	14–0	5.2;	2991,	542;	2401	Anawal;	3-0
335	Capaladhara SGD.; ચાપલધારા	S;	4–0	0.6;	138;	29;	138	Songadh;	4-0
336	Cāraṇawāḍā BNS.; ચારણવાડા	E,	2–0	1.9;	499;	102;	499	Bansda;	2-0
337	Cāraṇi MGL.; ચારણી	E;	25–0	0.9;	253;	35;	250	Umerpada;	2-0
338	Carēṭhā MGL.; ચરેઠા	W;	2–0	1.4;	214;	20;	214	Simodra;	2-0
339	Cari CKL.; ચરી	S;	8–0	1.4;	922;	178;	908	Ghej;	2-0
340	Cāsā CKL.; ચાસા	N;	6–0	1.5;	1476;	345;	1071	Local;	
341	Cās-Māṇḍavā DRC.; ચાસ-માંડવા	NE;	20–0	1.2;	155;	36;	155	Dharampur;	20-0

Railway St.; Distance in miles.	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance.	Drinking water facilities	Institutions and other information.
5	6	7	8	9
Navsari; 12-0	Navsari; 11-0; Sun.	Sarpore; 2-0	w.	tl.
Anaval; 7-0	Valvada; 1-2; Sun.	Valvada; 1-0	w.	sl (pr).; pyt.; ch.; lib.
Madhi; 7-4	Kamalchod; 1-4; Sun.	Local;	w.	sl (pr).; tl.; ch.; lib.
Unai; 1-0	Unai; 1-0; Tue.	Unai; 1-0	w.,rv.	
Khandbara; 15-0	Khandbara; 15-0; Sun.	Navapur; 24-0	w.	sl (Lokshala).
Kevdi Road: 8-0	Bhenskatri; 1-0; Sun.	Vyara; 15-0	w.,rv.	
Songadh: 7-0	Bandharpada 4-0, Mon. Mota;	Songhdh; 7-0	w.	sl (Lokshala); pyt.; cs
Umerpada; 15-0	Umerpada; 15-0;		w.	pyt.; cs.
Doswada; 2-4	Songadh; 6-4; Sun.	Songadh; 6-4	n.,w.	sl (pr).
Vapi; 2-4	Vapi; 2-4;	Vapi; 2-4	w.,t.	2sl (2pr).; pyt.; 4tl.; ch.; lil.
Local;	Local.	Local.	w.	2sl (pr. m).; pyt.; cs.; (c).; 2tl.; ch.; lib.; 3dp..
Songadh, 2-0	Songadh, 2-0; Sun.	Songadh. 2-0	w.	sl (Lokshala).
Vyara: 5-0	Vyara; 5-0; Sat.	Vyara; 6-0	w.	sl (pr).; pyt.; cs.; cch.
Bulsar; 6-0	Bulsar; 6-0;	Parnera; 2-0	w.,rv., t.	2sl (2pr).; pyt.; fr.; (Mg. Vad. 13).; 2tl.; ch.; lib.; dp.
Zankhvav; 17-0	Pipalwada; 3-0; Sat.	Mandvi; 10-0	n.	
Chinchpada; 7-0	Chinchpada; 7-0; Thu.	Chinchpada; 7-0	rv.	
Bulsar; 38-0	Mandavi; 4-0; Fri.	Nana-pondha;10-(Chiwal)	rv.,p.	sl (pr).
Umerpada; 0-4	Umerpada; 0-4.		w.	pyt.
Vapi, 1-4	Vapi, 1-4,	Vapi, 1-4	w.	
Navsari: 5-0	Navsari, 5-0, Sun.	Vanjarkui, 1-6	w.	sl (pr).; pyt.
Vapi; 3-0	Vapi, 3-0,	Local:	w.,rv.	sl (pr).; pt.
Anwal; 3-0	Local: Sat.	Local.	w.,rv.	sl (pr).; mq.; ch.; dp. This village was transferred to Bansda taluka from Chikhali taluka after the census of 1951.
Songadh; 4-0	Songadh; 4-0; Sun.	Songadh. 4-0	w.	pyt.
Kevadi road: 2-4	Bansada: 2-0; Fri.	Bansda. 2-0	w.,rv.	
Keori; 2-0	Keori; 2-0;	— —	w.	
Simodra: 2-0	Wankal, 9-0; Fri.	Simodra; 1-4	w.	dg.
Bulsar; 10-0	Vad; 4-0; Wed.	Khergam; 4-0	w.	sl (pr).; cs. (c).
Rankuwa; 3-4	Rankuwa; 3-0;	Degam; 2-4	w.,rv.	sl (pr).; pyt.; mq.; 3dg.; ch.
Bulsar;	Bopi; 4-0; Fri.	Dharampur; 20-0	rv.	sl (pr).

Serial No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati; 1	Direction; Travelling distance from taluka. peta H.Q. 2	Area (Sq. miles); Population; Households; Agricultural Population. 3	Post office; Distance. in miles. 4
342	Cauvarā DRP.; ચોવરા	E; 38–0	0.8; 42; 28; 42	Dharampur; 38-0
343	Cāvasālā DR.; ચાવસાલા	SE; 27–0	5.3; 416; 74; 416	Dharampur; 27-0
344	Cavaḍā MGL.; ચવડા	E; 43–0	1.3; 403; 58; 403	Umerpada; 13-0
345	Cepā DRP.; ચેપા	S; 41–0	2.5; 345; 22; 345	Dharampur; 41-0
346	Chamusar MGL.;છમુસર	SW; 13–0	1.7; 277; 47; 257	Kim; 4-0
347	Chāpar GND.; છાપર	W; 9–0	1.4; 894; 218; 840	Amalsad; 2-0
348	Chāparā NVR.; છાપરા	S; 2–0	1.1; 930; 205; 238	Navsari; 2-0
349	Charawāḍā BLR.; છરવાડા	N; 8–0	3.5; 1770; 312; 1702	Chikhla; 3-4
350	Charawāḍā PRD.; છરવાડા	S; 9–0	1.2; 643; 145; 393	Vapi; 2-0
351	Cheḍachā KMJ.; છેડછા	W; 10–4	0.7; 29; 8; 29	Kosmadi; 1-0
352	Chelavās MDV; છેલવાસ	NE; 13–0	........deserted village	....
353	Chevadi VRA.; છેવડી	SE; 15–0	0.8; 23; 4; 23	Vyara; 16-0
354	Chiṇam NVR.; છીણમ	NW; 6–0	1.6; 1169; 222; 681	Local;
355	Chiṇḍiā VRA.; છીંડીયા	S; 4–0	2.0; 576; 98; 530	Vyara; 3-0
356	Chīramā VRA.; છીરમા	S; 5–0	0.8; 189; 35; 121	Kapura; 2-0
357	Chiri PRD.; છીરી	N; 12–0	1.6; 599; 108; 599	Vapi; 3-0
358	Chitrā BRD.; છીત્રા	S; 12–0	0.8; 255; 53; 246	Supa; 3-0
359	Cībhaḍakacch PRD.; ચીભડકચ્છ	S; 22–0	1 3; 855; 132; 619	Lawacha; 4-0
360	Cīcozar DRP.; ચીચોઝર	E; 5–0	1.9; 333; 73; 333	Bilapudi 3-0
361	Cījagām NVR.: ચીજગામ	SW; 10–0	2.7; 1503; 398; 582	Local;
362	Cīkaṭiā BNS.; ચીંકટીઆ	W; 3–0	0.9; 309; 56; 307	Bansda; 2-4
363	Cīkhalā BLR.; ચીખલા	N; 4–0	1.9; 1241; 237; 668	Local;
364	Cīkhali CKL.; ચીખલી	Head-quarters.	0.4; 4066; 837; 445	Local;
365	Cīkhali KMJ.; ચીખલી	NE; 10–2	2.1; 685; 136; 565	Vihan; 0-6
366	Cīkhali VRA.; ચીખલી	NE; 3–0	3.0; 923; 158; 896	Vyara; 3-0
367	Cīkhali-Bheṇ SGD.; ચીખલી-ભેણ	NE; 12–0	1.7; 497; 80; 495	Songadh; 12-0
368	Cīkhali-Khadakā SGD.; ચીખલી-ખડકા	SW; 8–0	1.1; 466; 71; 463	Vyara; 4-0
369	Cīkhaladā VRA.; ચીખલદા	SE; 3–0	1.8; 739; 123; 735	Vyara; 2-0
370	Cīkhalapādā SGD.; ચીખલપાડા	S; 15–0	0.7; 97; 18; 97	Songadh; 15-0
371	Cīkhalavāv VRA.; ચીખલવાવ	N; 2–4	2.0; 603; 103; 593	Vyara; 2-4
372	Cīmakuvā SGD.; ચીમકુવા	S; 5–0	2.2; 329; 58; 326	Songadh; 5-0
373	Cīmanapāḍā CKL.; ચીમનપાડા	SE; 14–0	0.8; 266; 65; 266	Dharampur; 7-0
374	Cīmer SGD.; ચીમેર	SE; 20–0	6.2; 456; 74;	Songadh; 20-0
375	Cīmīpāṭal MGL.; ચીમીપાટલ	E; 45–0	1.3; 146; 20; 146	Umerpada; 11-0

Railway St.; Distance.	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance.	Drinking water facilities	Institutions and other information.
5	6	7	8	9
Bulsar; 56-0	Ukta; 15-0; Sun.	Dharampur; 38-0	p.	
Bulsar; 45-0	Huda; 8-0; Tue.	Dharampur; 27-0	p.	
Umarpada; 13-0	Umerpada; 13-0;		w.	sl (pr).; cs.
Bulsar; 59-0	Varwath; 8-0; Sun.	Dharampur; 41-0	p.	
Kim; 4-0	Kim; 4-0;	Mandvi; 0-4	w.	
Amalsad; 2-0	Sari Bujarang; 3-0;	Amalsad; 2-0	w.,t.	sl (pr).; pyt.; cs. (c).; tl.; ch.
Navsari; 2-0	Navsari; 2-0; Sun.	Navsari; 2-0	w.	sl (pr).; pyt.; 2tl.; dh.; ch.; lib.
Dungri; 4-0	Dungari; 4-0;	Dungri; 4-0	t.	3sl (3pr).; pyt.; cs. (c.); dg.; dh.; 3lib.
Vapi; 2-0	Vapi; 2-0;	Vapi; 1-4	w.	sl (pr).
Surat; 4-0	Surat; 4-0; Sat.	Antroli; 2-0	w.	pyt.
....	deserted villages	....	....	....
Vyara; 16-0	Balpur; 6-0; Mon.	Vyara; 16-0	w.	pyt.
Maroli; 2-0	Maroli; 2-0;	Maroli; 2-0	w.,p.	sl (pr).; pyt.; cs.; tl.; lib.
Vyara; 3-0	Vyara; 3-0; Sat.	Vyara; 4-0	w.,rv.	sl (lokshala).; pyt.; cs.; ch.
Vyara; 5-0	Vyara; 5-0; Sat.	Balpur; 1-0	w.,rv.	pyt.; cs.
Vapi; 3-0	Vapi; 3-0;	Vapi; 3-0	w.	sl (pr).; tl.
Navsari; 10-0			w.	sl (pr).
Vapi; 12-0	Local; Sun.	Selvas; 2-4	w.,t.	sl (pr).; dg.
Bulsar; 20-0	Ukta; 2-0; Sun.	Dharampur; 5-0	rv.	
Amalsad; 4-4	Amalsad; 4-4	Panar; 1-0	w.	sl(pr) ; pyt.; tl.
Unai; 9-0	Bansda; 2-4 Fri.	Bansda. 2-0	w.,rv.	
Bulsar; 3-0	Bulsar; 3-0	Local;	w.,t.	sl(pr).; 2tl.; dh.; lib.
Local;	Local;	Local	w.	sl(pr)..; pyt..; 3cs. (3c.).; 7tl.; 2mq..; 8dg.; 2dh.; gym..; ch..; lib..; dp,, Veterinary dp.
Bardoli; 7-0	Bardoli; 7-0 Sat.	Sevani; 2-2	w.	sl(pr).; pyt.; 2tl.; ch.;lib.
Vyara; 3-0	Vyara; 3-0 Sat.	Vyara; 3-0	w.,rv.	sl(pr).; pyt.; cs.; ch..
Vyara; 5-0	Songadh; 12-0 Sun.	Vyara; 5-0	w.	sl(lokshala).; pyt.
Vyara; 4-0	Vyara; 4-0 Sat.	Vyara; 4-0	w.	Sl(pr).; pyt.; cs.(c.).;
Vyara; 2-0	Vyara; 2-0 Sat.	Vyara; 3-0	w.,rv.	sl(lokshala).; pyt.; cs.
Songadh; 15-0	Songadh; 15-0 Sun.	Songadh; 15-0	w.,rv.	
Vyara; 2-4	Vyara; 2-4 Sat.	Vyara; 2-4	w.	sl(pr).; pyt.; lib.
Songadh; 5-0	Songadh; 5-0 Sun.	Songadh; 5-0	w.	sl(Lokshala).; pyt.; ch.
Bulsar; 18-0	Khergam; 6-0	Khergam; 6-0	w.,rv.	
Songadh; 20-0	Singana; 8-0 Tue.	Virathva;	w.	sl(Lokshala).;pyt.;cs;ch.
Umerpada; 11-0	Umerpada; 11-0		w.	sl(pr).; cs.

Serial No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati; 1			Direction; Travelling distance. from taluka/peta H. Q. 2		Area (Sq. miles.); Population Households; Agricultural Population. 3				Post office; Distance in miles. 4	
376	Cĩncabarḍī	VRA.;	ચીંચબરડી	SE;	11-0	1.5;	204;	31;	182	Vyara;	11-0
377	Cĩncāi	BLR.;	ચીંચાઈ	N;	18-0	1.1;	415;	84;	370	Wankal;	6-0
378	Cĩncapāḍā	DRD.;	ચીંચપાડા	SE;	25-0	0.2;	121;	21;	121	Dharampur;	25-0
379	Cĩncawāḍā	BLR.;	ચીંચવાડા	SE;	5-0	0.6;	405;	69;	405	Parnena;	1-0
380	Cĩncī	CRS.;	ચીંચી	NW;					deserted		
381	Cītaladā	MGL.;	ચિતલદા	E;	18-0	2.3;	316;	45;	276	Wankal;	12-0
382	Cītālī	CKL.;	ચીતાલી	NE;	12-0	1.3;	520;	89;	513	Jogwad;	0-2
383	Cītapur	SGD.;	ચીતપુર	SE;	38-0	1.2;	422;	69;	407	Navapur;	24-0
384	Cīval	PRD.:	ચીવલ	E;	15-0	2.7;	1194;	205;	1140	Mota-Vaghchhipa;	6-0
385	Cokhaḍ	NVR.;	ચોખડ	N;	6-4	1.4;	346;	72;	340	Dhaman;	2-0
386	Cokhavāḍā	MGL.;	ચોખવાડા	E;	34-0	1.1;	306;	49;	263	Umerpada;	6-0
387	Coṇḍhā	BNS.;	ચોંઢા	S;	14-0	3.7;	828;	183;	796	Bansda;	14-0
388	Cora-āṁba	MDV.;	ચોરઆંબા	N;	8-4	1.3;	393;	55;	391	Zankhvav;	6-0
389	Corāsī	KMJ.;	ચોરાસી	NE;	2-4	0.9;	182;	30;	175	Kathor;	2-0
390	Corawāḍ	SGD.;	ચોરવાડ	W;	40-0	2.3;	669;	119;	632	Salher;	16-0
391	Corawaṇī	BNS.;	ચોરવણી	S;	10-0	4.2;	526;	110;	525	Bansda;	10-0
392	Cosapāḍā	DRP.;	ચોસપાડા	E;	27-0	0.8;				deserted	
393	Covīsī	NVR.;	ચોવીસી	NE;	1-4	1.5;	2457;	592;	1859	Kaliawadi;	0-4
394	Cuḍel	MDV.;	ચુડેલ	W;	9-0	1.4;	357;	46;	356	Mandvi;	10-0
395	Cunāvāḍī	VRA.;	ચુનાવાડી	S;	24-0	5.0;	653;	123;	623	Unai;	7-0
396	Dābakhal	DRP.;	દાબખલ	S;	24-0	3.7;	327;	60;	327	Dharampur;	24-0
397	Dābhāḍī	DRP.;	દાભાડી	SE;	25-0	0.8;	143;	25;	143	Dharampur;	25-0
398	Ḍabhalāi	NVR.;	ડભલાઈ	SE;	11-0	0.6;	257;	64;	245	Satem;	1-4
399	Ḍābhel	NVR.;	ડાભેલ	S;	5-4	1.9;	2251;	436;	1316	Local;	
400	Ḍabholī	CRS.;	ડભોલી	NW;	3-4	1.0;	957;	175;	850	Singanpor;	1-0
401	Daḍakavāṇ	VRA.;	દડકવાણ	SE;	5-4	0.8;	261;	47;	259	Kapura;	3-0
402	Dādākuī	MDV.;	દાદાકુઈ	N;	8-0	0.7;	216;	32;	213	Mandvi;	8-0
403	Dādariā	VLD.;	દાદરીઆ	N;	5-0	1.8;	749;	133;	741	Buhari;	1-0
404	Daḍhavāḍā	MDV.;	દઢવાડા	NE;	6-0	1.9;	544;	95;	535	Mandvi;	6-0
405	Dahīkhad	DRP.;	દહીખડ	S;	25-0	4.2;	365;	68;	365	Dharampur;	25-0
406	Dakhaṇawāḍā	CRS.;	દખણવાડા	SW;	6-2	0.5;	93;	23;	90	Niol;	2-0

Railway St.; Distance in miles.		Weekly Bazar; Distance; Bazar Day.			Motor Stand; Distance.		Drinking water facilities	Institutions and other information.
5		6			7		8	9
Vyara;	11–0	Balpur;	4–0	Mon.	Vyara;	11–0	w.	pyt.
Bulsar;	14–0	Local;		Sat.	Wankal;	5–0	w.	sl(pr).; 2tl.
Bulsar;	43–0	Huda;	13–0	Tue.	Penth;	16–0	rv.,P.	
Bulsar;	3–0	Bulsar;	3–0		Local;		w.	
....		....		....	deserted...........			
Zankhvav;	6–0	Zankhvav;	6–0		Zankhvav;	6–0	w.	
Rankuwa;	6–0	Kangwai;	1–0	Fri	Tankal;	2–4	rv.	2sl(pr. lokshala).; pyt.; tl.; dg.;
Navapur;	24–0	Navapur;	24–0	Sat.	Navapur;	24–0	w.	sl(pr).; pyt.; dg.
Pardi;	15–0	Lakhmapore;	3–0	Sat.	Local;		w.,rv.	sl(pr).; pyt.; tl;dg.
Maroli;	2–0	Navsari;	5–0	Sun.	Local;		w.	pyt.; cs. (mp).; tl.; dg.; ch.; lib.
Umerpada;	6–0	Umerpada;	6–0				w.	sl(pr).; pyt.; cs.;fr(Maha. shivratri-Mg.; Vad. 13).; tl.
Unai;	25–0	Anklach;	4–0	Sat.	Bansda;	14–0	rv.,str., w.	sl(pr)-; ch.
Zankhvav;	6–0	Devgadh;	2–0	Thu.	Isar;	1–0	w.	sl(m).; cs.
Sayan;	6–0	Surat;	11–0	Sat.	Local;		w.,rv.	pyt.; cs. (mis.).
Navapur;	39–0	Salher;	16–0	Fri.	Songadh;		w.	pyt.;
Unai;	17–0	Local;		Thu.	Bansda;	10–0	w.rv.	sl (pr).; ch.
....		....		....	deserted		....	....
Navsari;	2–0	Navsari;	2–0	Sun.	Kaliawadi;	1–0	w.	sl (pr).; pyt. cs.; (mis).; 4tl.; ch.; lib.
Kim;	21–0	Amba;	4–0	Sat.	Zankhvav;	1–4	w.	sl (Lokshala).; cs.
Sara;	1–0	Kharjai;	1–0	Wed.	Unai;	7–0	w.	sl(Lokshala).; pyt.; cs.; tl.; (Mahadev).
Bulsar;	42–0	Huda;	10–0	Tue.	Dharampur;	24–0	p.	sl (pr).
Bulsar;	25–0	Navsari;	12–0	Sun.	Sarpore;	1–4	w.	sl (pr).; fr.; (Kt. Sud 15); 2tl. (Hanuman)
Navsari;	12–0	Navsari;	6–0	Sun.	Local;		pl.	sl (pr) pyt.; tl; 4mq.; 4dg.; dh.; ch.; 2lib.;3dp.
Maroli;	4–0	Surat;	3–0	Sat.	Bahucharaji;	1–0	w.	sl (pr); 4tl; dh; lib.
Surat;	3–0	Vyara;	5–0	Sat.	Molotha;	1–0	w.	pyt.
Vyara;	6–0	Devgadh;	4–0	Thu.	Junwan;	4–0	w.	cs; (c).
Zankhvav;	8–0	Buhari;	1–0	Wed.	Local;		w.	sl (pr).
Madhi;	16–0	Mandvi;	6–0	Wed.	Santhvav;	4–0	w.	sl(pr).; cs. (mis).;ch.;dp.
Madhi;	16–0	Dodhani;	5–0	Fri.	Chiwal;	10–0	rv.p.	sl (pr).
Bulsar;	53–0	Surat;	6–0	Sat.	Kumbharia;	1–4	w.	tl.
Niol;	1–0	Navsari;	6–0	Sun	Nadod;	1–4	w.	mq.

Serial No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati.	Direction; Travelling distance. from taluka peta H.Q. 2		Area (Sq. ms.); Population Households; Agricultural Population. 3				Post office; Distance in miles. 4	
407	Ḍālakī NVR.; ડાલકી	W;	7-0	0.6;	237;	53;	205	Maroli;	3-0
408	Dāmakā CSR.; દામકા	W;	14-0	5.4;	1771;	389;	1414	Local;	
409	Ḍāṁbhar NVR.; ડાંભર	NE;	5-0	1.8;	979;	210;	877	Local;	
410	Ḍāṇḍaval DRP.; ડાંડવલ	E;	13-0	2.5;	113;	18;	113	Dharampur;	13-0
411	Danḍesar NVR.; દંડેસર	SE;	7-0	1.4;	586;	117;	252	Munsad;	2-0
412	Dāṇḍi NVR.; દાંડી	SW;	12-0	12.2;	771;	194;	210	Local:	
413	Dāntej NVR.: દાંતેજ	SW;	4-0	0.7;	428;	100;	425	Navsari;	3-0
414	Dantorā CRS.: દંતોરા	S;	4-0	....	deserted	...		....	...
415	Daradā MGL.; દરદા	E;	16-0	0.4;	211;	14;	160	Umerpada;	2-4
416	Daraḍi SGD.; દરડી	S;	12-0	1.1;	74;	11;	74	Songadh;	12-0
417	Daśawāḍa PRD.: દશવાડા	SW;	6-0	0.7;	356;	64;	333	Paria:	0-6
418	Dastān PLN.; દસ્તાન	N;	8-0	2.1;	705;	139;	621	Gangadhra;	1-0
419	Debarapāḍā CKL.; ડેબરપાડા	SE;	12-0	7.0;	510;	98;	510	Dharampur;	7-0
420	Dedavāsaṇ MHW., દેદવાસણ	W;	5-0	2.1;	869;	152;	867	Mahuwa;	6-0
421	Degām CKL.: દેગામ	NE;	4-0	5.1;	3372;	675;	2563	Local;	
422	Degām PRD.; દેગામ	S;	15-0	1.9;	773;	150;	328	Keparli;	3-0
423	Degamā VLD.; દેગામા	NE;	3-0	5.5;	2464;	471;	2349	Local;	
424	Delāḍ KMJ.; દેલાડ	E;	9-0	2.7;	738;	137;	674	Orna;	1-4
425	Delāḍ OPD.; દેલાડ	E;	8-0	1.1;	527;	108;	448	Sayan;	1-0
426	Delāḍvā CRS.; દેલાડવા	SE;	6-0	2.5;	717;	157;	640	Local;	
427	Delāsā OPD.; દેલાસા	W;	6-0	1.4;	513;	106;	184	Olpad;	6-0
428	Delavādā NVR.; દેલવાદા	E;	7-0	2.5;	905;	205;	903	Maroli;	6-0
429	Delavāḍā VLD.; દેલવાડા	SW;	3-6	0.7;	649;	128;	636	Silker;	1-0

Railway St.; Distance in miles. 5	Weekly Bazar; Distance Bazar Day. 6	Motor Stand; Distance. 7	Drinking water facilities 8	Institutions and other information. 9
Maroli; 3-0	Surat; 15-0 Sat.	Local;	w.	sl (pr); pyt; fr; (Srn. Vad-Mon.); 2tl; gym.
Surat; 15-0	Navsari; 6-0 Sun.	Vedchha; 1-6	w.	sl (pr); cs; (mis); ur (April); tl.;mq; dg;lib.
Vedchha; 1-4	Ukta; 3-0 Sun.	Dharampur;13-0	P.	
Bulsar; 31-0	Navsari; 8-4 Sun.	Munsad; 1-4	w.	sl (pr).; tl.
Navsari; 8-4	Navsari; 12-0 Sun.	At; 3-0	w.	sl (pr); cs; (mis); fr. (every Vad-15); mq; dg; 4dh; ch; lib; well known historical place because of Gandhiji's famous Dandi-Kooch.
Navsari. 11-0	Navsari; 3-0 Sun.	Italawa; 1-0	w.	sl (pr).
Navsari; 3-0				
....	..................deserted	.....	....	....
Umerpada. 2-4	Umerpada. 2-4		w.	sl (pr).; cs.
Songadh; 12-0	Umerda; 1-0 Tue.	Songadh: 12-0	w.	
Udwada. 4-0	Udwada: 4-0 Tue	Paria: 1-0	w.	sl (pr).; tl.
Gangadhra; 1-0	Gangadhra. 1-0	Kadodra; 3-0	w.	sl (pr); pyt; 2tl; dh; ch; lib.
Bulsar; 19-0	Khergam; 3-4	Khergam. 3-4	w.	2sl (pr); Lokshala; tl.;
Anaval; 13-0	Dholikui; 2-0 Sun.	Fulwadi: 2-0	rv.	sl. (pr); lib.
Chikhali: Road; 0-4	Chikhali. 1-0	Local:	w.,t.	4sl (3pr).; (m).; pyt.; cs. (c.): fr (Sra. Vad s).; 9 tl.; mq.; 6 dg.; ch.; lib.; 2dp.
Vapi: 8-0	Chhibhad; kachh: 3-0 Sun.	Vapi. 8-0	w.,t.	sl (pr).: pyt.; ch.
Madhi. 16-0	Buhari: 1-0 Wed.	Bajipura: 1-2	w., rv.	2sl (2pr).; pyt.; cs. (mis.); 2tl.; ch.; lib.
Bardoli: 7-0	Bardoli. 7-0 Sat	Local:	w.	sl(pr).; pyt.; 2tl.; dg.; lib.
Sayan; 1-0	Surat. 11-0 Sat.	Sayan; 1-0	w.	sl(pr.); 3 8tl.
Niol; 1-0	Surat; 6-0 Sat.	Local.	w.	sl(pr).; tl.; dh.
Sayan; 16-0	Surat; 18-0 Sat	Bhagva; 2-0	w., P.	tl.; dg.
Maroli; 6-0	Navsari: 6-0 Sun.	Parujan; 3-0	w.	sl(pr).; pyt.; 2tl.; dh.; ch.; lib.
Bardoli; 9-0	Valod; 4-0 Fri	Siker-Del-vada; 0-3	w.,t.	sl (pr.).; lib.

Sr. No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati. 1	Direction; Travelling distance. from taluka/peta H. Q. 2	Area (Sq. ms.); Pop.; Households; Agricultural Population. 3	Post office; Distance. 4
430	Delī PRD.; ડેલી ...	E; 13-0	1.0; 960; 185; 951	Mota Vaghchhipa;
431	Delod KMJ.; દેલોડ ...	E; 1-0	1.0; 672; 128; 656	Kamrej 1-0
432	Deśāḍ GND.; દેશાડ ...	W; 1-0	1.5; 480; 100; 480	Gandevi; 1-4
433	Desarā GND.; દેસરા ...	SW; 4-0	1.5; 3716; 796; 419	Bilimora; 1-0
434	Dethalī KMJ.; દેથલી ...	N; 12-0	1.2; 110; 23; 102	Vihan; 1-0
435	Devadh PRD.; દેવધ ...	S; 8-0	1.0; 580; 79; 334	Kumbharia; 1-0
436	Devadhā GND.; દેવધા ...	W; 3-0	1.0; 1469; 295; 686	Amalsad; 2-0
437	Devagaḍh MDV.; દેવગઢ ...	N; 9-0	2.2; 856; 114; 706	Zankhvav; 5-0
438	Devagīrī MDV.; દેવગીરી ...	NE; 10-0	0.8; 129; 29; 129	Mandvi; 10-0
439	Devalapāḍā SGD.; દેવલપાડા ...	SW; 6-0	0.8; 141; 24; 141	Songadh; 6-0
440	Devasır GND.; દેવસર ...	W; 2-4	1.2; 2208; 478; 559	Bilimora; 1-0
441	Dhagaḍmāl PRD.; ધગડમાલ ...	E; 12-0	1.1; 539; 94; 460	Mota Vaghchhipa; 4-0
442	Dhajāṁbā SGD. ; ધજાંબા ...	N; 14-0	2.9; 907; 149; 877	Songadh; 14-0
443	Dhākamāḷ BNS.; ધાકમાળ ...	E; 4-0	2.1; 320; 64; 320	Bansda; 4-0
444	Dhakavāḍā GND.; ધકવાડા ...	S; 3-0	1.1; 779; 148; 626	Gandevi; 3-0
445	Dhamaḍāchā GND.; ધમડાછા ...	W; 2-0	2.0; 3512; 681; 1742	Local;
446	D... naḍācī BLR.; ધમડાચી ...	E; 2-0	1.9; 906; 177; 883	Local;
447	Dhāmadhumā CKL.; ધામધુમા ...	SE; 16-0	1.0; 431; 86; 431;	Godthal: 2-0
448	Dhāmaḍod MGL.; ધામડોડ ...	W; 20-0	3.7; 531; 102; 472	Hathuran: 1-4
449	Dhāmaḍod-Ena PLN.; ધામડોદએના ...	E; 5-0	1.0; 655; 114; 539	Gangadhra: 2-0
450	Dhāmaḍod-Luṁbhā BRD.; ધામડોદલુંભા ...	NE; 2-4	5.8; 814; 172; 704	Bardoli; 3-0
451	Dhāmakhaḍī MHW.; ધામખડી...	SE; 11-4	1.0; 281; 41; 281	Mahuwa; 12-0
452	Dhāmaṇ NVR.; ધામણ ...	N; 5-0	1.5; 1526; 308; 1321	Local;

Railway St.; Distance. 5	Weekly Bazar; Distance; Bazar Day. 6	Motor Stand; Distance. 7	Drinking water facilities 8	Institutions and other information. 9
Pardi; 11-0	Lakhmapore; 0-4 Sat.	Dhagadmal; 0-4	W.,rv.	sl(pr).; cs.; (c.),; tl,; mq,; dg.
Sayan; 8-0	Surat; 11-0 Sat.	Local;	W.	sl(pr); pyt.; cs. (mis.).; 2tl.; lib.
Gandevi; 1-4	Gandevi; 1-4 Wed.	Gandevi; 1-2	W.,t., rv.	pyt.; tl.
Bilimora; 0-4	Bilimora 1-0	Bilimora; 0-4	W.,rv., t.	sl(pr).; pyt.; fr. (An Vad 14).; 2tl.; 2dg.; ch.
Bardoli; 8-0	Bardoli; 8-0 Sat.	Sanipura; 1-0	W.	pyt; tl.
Niol; 1-0	Surat; 4-0 Sat.	Kumbharia; 1-4	W.	sl(p).; pyt.; 2tl.; ch.
Amalsad; 2-0	Bilimora; 2-0	Amalsal; 2-0	W.,rv.	sl(pr).; pyt.; 2tl,; mq.; dg.; ch.; lib.
Zankhvav; 5-0	Local; Thu.	Local;	W.,n.	sl(m).; pyt.; cs.; dg; ch.
Zankhvav; 10-0	Devgadh; 2-0 Thu.	Devgadh; 2-4	W.	
Doswada; 3-0	Bandhrpada-Mota; 3-0 Mon.	Songadh; 6-0	W.;	fr (Devlimata.; Mrg. Sud 15).
Bilimora; 1-4	Bilimora; 1-0	Local;	W.,t., rv.	sl(pr).; pyt.; cs.(mp).; 2tl.; ch.; lib.
Pardi; 12-0	Lakhmapore; 2-0 Sat.	Local;	rv.,t.	Sl(pr).; tl.; dp.; cch.
Songadh; 14-0	Songadh; 14-0 Sun.	Songadh; 14-0	W.,rv., P.	Sl(pr).; pyt.; cs.
Unai; 11-0	Bansda; 4-0 Fri.	Bansda; 4-0	W.,str.	Sl(pr).
Bilimora; 2-4	Gandevi 3-0 Wed.	Devsar; 1-0	W.	Sl(pr).; pyt.; tl.; lib.
Amalsad; 2-0	Sari-Bajarang; 2-0	Local;	rv.,W.	Sl(pr).; pyt.; cs.(c.).; 8tl.; mq.; dg.; ch.; lib.; 2dp.
Bulsar; 2-0	Bulsar; 2-0	Local;	W.	Sl(pr).; tl.; lib; dp.
Bulsar; 25-0	Dharampur; 9-0	Fadwel: 5-4	W.,rv.	Sl(pr).
Hathuran; 1-4	Hathuran; 1-4	Hathuran; 1-4	W.,P.	Sl(pr).; pyt.; cs.; tl.; mq.; dg.; ch.
Gangadhra; 2-0	Gangadhra; 2-0	Palsana; 5-0	W.	Sl(pr).; pyt.; tl.; ch; lib.; dp.
Bardoli; 3-4		Local;	W.	Sl(pr).; pyt.; 4tl.; dg.; ch.; lib.
Anaval; 7-0	Valvada; 1-0 Sun.	Valvada; 0-4	W.	Sl(pr).
Maroli; 3-0	Navsari; 4-0 Sun.	Asunder; 1-2	W.	Sl.; pyt.; cs.(mp).; 3tl.; lib.; dp.

Sr. No.	Village or Town name in English: Taluka abbreviation. Village or Town name in Gujarati. 1	Direction; Travelling distance from Taluka/Peta H. Q. 2		Area (Sq. miles); Population, Households; Agricultural Population. 3				Post office; Distance in miles. 4	
453	Dhāmaṇadevī VRA.; ધામણદેવી	SE;	17–0	4.0;	339;	66:	339.	Buhari;	4-0
454	Dhāmaṇa-Vāngaṇ DRP.; ધામણ-વાંગણ	SE;	30–0	0.2;	85;	15;	85.	Dharampur;	30-0
455	Dhāmaṇī DRP.; ધામણી	SE;	12–0	5 8,	403,	73:	403;	Dharampur;	12-0
456	Dhāmodalā VLD.; ધામોદલા	NE;	9–0	3.0,	1020;	176:	1008	Kiher;	2-0
457	Dhamoḍī SGD.; ધમોડી	S;	12–0	3.4;	951;	161;	931	Vyara;	6-0
458	Dhanamaulī SGD.: ધનમૌલી	S;	15–0	1.2;	177;	23;	177	Songadh;	15-0
459	Ḍhāngadhar VRA.; ઢાંગધર	SE;	20–0	5.8;	424;	87;	423	Dolvan;	9-0
460	Dhānkaval DRP.: ઢાંકવલ	E;	23–0	2 9;	237;	54,	237	Dharampur;	23-0
461	Dhanorī BLR., ધનોરી	NE;	9–0	2 9,	1270;	277,	1210	Atgam;	2-0
462	Dhanori GND.; ધનોરી	NE;	2–4	3.4,	1445;	281:	1193	Gandevi;	2-0
463	Dhanturi VRA., ધંતુરી	SE;	14–0	1.8;	501.	71:	474	Buhari;	7-0
464	Dhārāgirī NVR.; ધારાગીરી	NE;	2–0	1.0;	676.	150:	343,	Kaliawadi;	1-0
465	Dharamapor MDV.; ધરમપોર	W,	16–0	2.8;	590,	117;	589	Naninareli;	2-0
466	Dharamapur (including non-municipal area DRP.; ધરમપુર	Taluka Head-quarters.		8 3,	8921,	1712,	3704	Local;	
467	Dharamapurā VRA.; ધરમપુરા	W;	15–0	1 0:	130;	28;	130	Buhari,	3-0
468	Dharampurī BNS.; ધરમપુરી	E,	4–0	1 7,	779,	134,	685,	Unai;	3-0
469	Dhāraṇamāḷ DRP., ધારણમાળ	S;	48–0	0.3;	47,	10,	47	Dharampur;	48-0
470	Dharāsaṇā BLR.; ધરાસણા	N;	8–0	1 8;	1301;	277:	723	Local;	
471	Dhāruṭhā KMJ.; ધારૂઠા	E;	7–0	0.8;	262.	42,	142	Aste;	0-6
472	Dhāṭ VRA.; ધાટ	S;	7–0	3.5;	811;	131;	807	Vyara;	6-0
473	Dhātawā KMJ.; ધાતવા	NE;	4–0	1.2,	491,	99;	447	Kamrej;	5-0
474	Dhodhadakuvā DRP.; ધોધડકુવા	S;	14–0	1 6;	828;	125;	828	Sukhla,	4-0
475	Dholakā VRA. ધોળકા	S;	20–0	2 8:	245,	43,	245	Buhari;	5-0
476	Ḍholīāumar VRA.; ઢોલીઆઉમર	SE,	12-0	1 8,	147.	26;	147	Vyara.;	12-0
477	Dholikui MHW., ધોલીકુઈ	W;	4–0	0.7;	705;	145;	627	Mahuwa.	4-0
478	Dholīkui MGL.; ધોલીકુઈ	SE.	7–0	1.4;	236;	36;	232	Wankel;	1-0
479	Ḍholuṁbar BNS.; ઢોલુમ્બર	SW;	10–0	1.8,	373,	83;	373	Bansda;	10-0
480	Ḍholuṁbar CKL.. ઢોલુંબર	SE.	16-0	3 3,	842;	158,	833.	Dharampur,	9-0
481	Ḍhongīāṁbā VRA.; ઢોંગીઆંબા	SE;	15–0	3 0.	32;	5;	26	Vyara;	15-0
482	Dhoraṇ KMJ.; ધોરણ	NE;	3–0	3.3;	316;	72;	278	Pardi;	0-1

Railway St.; Distance. 5	Weekly Bazar; Distance; Bazar Day. 6	Motor Stand; Distance. 7	Drinking water facilities 8	Institutions and other information. 9
Unai; 7-0	Balpur; 2-0; Mon.	Gadat; 7-0	w.,rv.	sl(pr).; pyt.
Bulsar; 30-0	Nani Vahiyal; 5-0; Thu.	Chiwal; 21-0	rv.	sl(pr).
Bulsar; 30-0	Nani Vahiyal; 5-0; Thu.	Dharampur; 12-0	rv.,p.	sl(pr).
Kiher; 2-0	Loterva. 2-0;	Balada; 4-0	w.,rv.	sl(pr).
Vyara; 6-0	Vyara; 6-0; Sat.	Vyara. 6-0	w.	sl(pr).; pyt.; cs.
Songadh; 15-0	Umarda; 1-0; Tue.	Songadh; 15-0	w.,rv.	
Sara; 7-0	Pipalvada; 2-4, Mon.	Dolvan; 8-0	w.	
Bulsar; 41-0	Nani Vahiyal; 10-0; Thu.	Dharampur; 23-0	rv.,p.	
Dungari. 6-0	Bulsar; 7-0;	Owada; 3-0	w.,t.	sl(pr).; pyt.; tl.; lib.
Gandevi; 3-0	Gandevi, 2-0; Wed.	Local;	w.,t.	sl(pr).; pyt.; cs.(c.).; tl.; ch.; lib.; dp.
Unai; 6-0	Panchol; Fri.	Gadat; 3-0	w.,rv	sl(lokshala).; pyt.; cs.(mp.).
Navsari; 2-4	Navsari; 2-0, Sun.	Kaliawadi; 1-4	w.	mq.
Kim, 15-0	Amba. 9-0; Sat.	Usked-ramkund; 2-0	w.,rv.	sl(pr).; cs.(c.).; tl.
Bulsar. 20-0	Local; Mon.	Local;	w.,pl.	3sl(2pr,h), mun., cs.; 18tl.; M.; mq.; 8dg.; dh., lib.; 4dp.
Anaval, 8-0	Buhari; 3-0, Wed.	Buhari. 3-0	w.	
Kevdi Road, 2-0	Bansda. 4-0; Fri.	Bansda; 4-0	w.,rv.	sl(pr).; pyt.; cs.(c.)
Vapi; 37-0	Ozar; 9-0; Thu.	Dharampur; 48-0	rv.	
Dungri; 2-0	Dungri; 2-0.	Dungri; 3-0	w.	sl(pr).,pyt.; cs.(c).;thl; lib.; dp.
Bardoli; 8-0	Bardoli; 8-0; Sat.	Orana; 1-0	w.	pyt.
Vyara; 6-0	Vyara; 6-0; Sat.	Local;	w.	sl(pr).; pyt.; cs.; ch.
Sayan, 4-0	Surat; 12-0; Sat	Local.	w.,t., rv.	
Pardi. 10-0	Sukhala; 4-0; Fri.	Sukhala. 4-0	w.,P.	sl(pr).; cs.(mp.).; tl.
Unai; 7-0	Bhenskatri; 5-4; Sun.	Unai; 7-0	w.,rv.	pyt.
Vyara; 12-0	Balpur; 8-0; Mon.	Vyara. 12-0	w.,rv.	sl(pr).; pyt.
Bardoli, 11-0	Local; Sun.	Local.	w	sl(pr).; pyt.; ch.; lib.
Wankel; 1-0	Wankel; 1-0; Fri.	Mangrol; 7-0	w.	pyt.; ch.
Anaval; 8-0	Vaghbari; 2-4; Thu.	Kandolpada; 1-4	w.	sl(pr).; tl.
Bulsar; 21-0	Dharampur; 9-0;	Fadwel. 5-0	w.,rv.	sl(pr).; pyt.
Vyara; 15-0	Balpur; 5-0; Mon.	Vyara; 15-0	w.	pyt.
Sayan; 4-0	Sukhlav; 2-4; Fri.	Pardi; 0-1	w.,rv.	sl (pr).; pyt.; cs. (c).; fr.; (Ct. Sud. 5).; 2tl.; dg.; 2dh.; ch.; lib.

Sr. No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati; 1	Direction; Travelling distance. from Taluka/peta H. Q. 2	Are (Sq. miles.); Population.; Households; Agricultural Population. 3	Post office; Distance in miles. 4
483	Ḍhunḍhesā MHW.; ઢુંઢેસા	W; 0–4	1.7; 241; 27; 241	Mahuwa; 2-0.
484	Dhūpī SGD; ધુપી	E; 24–0	0.3; 98; 18; 98	Navapur; 15-0
485	Dhwaj MDV.; ધ્વજ	E; 15–0	0.8;........................	deserted..............
486	Dhwajā-Āmbā MDV.; ધ્વજાઆંબા	NE; 9–0	1.9;........................	deserted..............
487	Dīgas KMJ.; દીગસ	E; 6–0	1.6; 1755; 384; 1442	Local;
488	Ḍīghī DRP.; ડીઘી	S; 50–0	1.1; 81; 19; 81	Dharampur; 50-0
489	Diheṇ OPD.; દિહેણ	SW; 8–0	5.0; 1444; 270; 1178	Local;
490	Ḍīnḍolī CRS.; ડીંડોલી	SE; 5–3	2.9; 1338; 252; 1117	Local;
491	Dīṇod MGL; દીણોદ	W; 7–0	6.0; 501; 120; 499	Kosamba; 9-0
492	Divaśī DRP.; દિવશી	S; 28–0	2.2; 353, 65; 353	Dharampur; 28-0
493	Dīvataṇ MGL.; દીવતણ	E; 34–0	0.2; 277; 48; 260	Umerpada; 4-0
494	Dīved BLR.; દીવેદ	S; 6–0	1.6; 1598; 382; 1476	Haria; 0-4
495	Dīxal DRP.; દીક્ષલ	SE; 29–0	0.3; 204; 41; 204	Dharampur, 29-0
496	Doladhā BNS.; દોલધા	W; 10–5	0.8; 277, 45; 277	Pratapnagar; 1-4
497	Ḍolārā VRA.; ડોલારા	S; 7–0	2.0; 621; 97; 570	Vyara; 7-0
498	Ḍolavāṇ VRA.; ડોલવાણ	S; 17–0	7.3; 2861; 475, 2502	Local;
499	Doṇ SGD.; દોણ	S; 7–0	1.3; 212; 37; 212	Songadh; 7-0
500	Doṇajā CKL.; દોણજા	E; 10–0	3.2; 1276; 221; 767	Local;
501	Ḍosawāḍā SGD.; ડોસવાડા	SW; 4–0	4.2; 1469; 256; 1414	Songadh; 4-0
502	Dubala-Fāliā BNS.; દુબલ-ફાલીઆ	W; 4–0	1.3; 304; 53; 300	Bansda; 4-0
503	Dulasāḍ BLR.; દુલસાડ	E; 14–0	3.3; 1371; 226; 1371	Vankal; 1-4
504	Dumadā SGD.; દુમદા	N; 3–0	2.4; 696; 110; 696	Songadh; 3-0
505	Ḍumakhal VLD.; ડુમખલ	S; 3–2	1.3; 435; 100; 429	Valod; 3-4
506	Ḍumalāv PRD.; ડુમલાવ	S; 7–0	3.0; 1484; 249; 1438	Rohina; 0-4
507	Ḍumas CRS.; ડુમસ	SW; 12–0	7.1; 3540; 909; 783	Local;
508	Ḍumbhāl CRS.; ડુંભાલ	E; 3–2	0.7; 328; 71; 126	Surat; 1-4

Railway St.; Distance.	Weekly Bazar; Distance. Bazar Day.	Motor Stand; Distance.	Drinking water facilities	Institutions and other information.
5	6	7	8	9
Bardoli 10-0	Mahuva 2-0; Mon.	Mahuwa; 1-0	w.	pyt.
Navapur 15-0	Navapur 15-0; Sat.	Navapur; 15-0	n.	
....	....	deserted	....	....
....	....	deserted	....	....
Kim; 9-4	Surat; 14-0; Sat.	Local;	w.	sl (pr).; pyt.; 6tl.; dh.; ch.; lib.; dp.
Bulsar; 68-0	Ozar; 3-0; Thu.	Dharampur; 50-0	rv.,n.	
Surat; 12-0	Surat; 12-0; Sat.	Local;	w.	sl (pr).; pyt.; 4tl.; dg.; 2dh.; ch.; dp.
Udhna; 2-0	Surat; 5-0; Sat.	Local;	w.	sl (pr).; pyt.; 3tl.; dg.; ch.
Asarma; 4-0	Kosamba; 9-0;	Mangrol; 7-0	w.	pyt.; 2cs. (2c).; tl.; mq.; dg.; ch.
Bulsar; 48-0	Lavkar; Sun.	— —	p.	
Umerpada; 4-0	Umerpada; 4-0;	— —	w.	sl (pr).; pyt.; cs.
Pardi ; 2-4	Bulsar; 7-0;	Parnera; 3-0	w.,t.	2sl (2pr).; pyt.; tl.
Bulsar; 47-0	Huda; 6-0; Tue.	Dharampur; 29-0	p.	
Dholikui; 2-0	Chapaldhara; 1-0; Sat.	Partapnagar; 1-4	w.	sl (pr).; tl.
Vyara; 7-0	Balpur; 1-0; Mon.	Vyara; 7-0	w.,rv.	sl (pr).; pyt.; cs.
Unai ; 4-0	Panchol; 2-0; Fri.	Local;	w.,rv.	3sl (3pr); pyt; cs.; (fmg)-fr.; (Ash Vad 14).; 2tl.; ch.; lib.
Songadh; 7-0	Songadh; 7-0; Sun.	Songadh; 7-0	w.	
Rankuwa; 3-0	Chapaldhara; 3-0;	Sarkhai; 1-4	w.,rv.	2sl (2pr).; pyt.; cs.; (c).; tl.
Local;	Songadh; 4-0; Sun.	Songadh, 4-0	w.	sl (pr).; pyt.; 2cs. (mp.; fmg).; tl.; dg.; ch.; lib.
Unai; 8-0	Limzer; 1-0; Sun.	Moti-Valzar; 2-0	w.;atr.	sl (pr).; ch.
Bulsar; 12-0	Faldhara; 3-0; Sun.	Vankal; 1-4	w.;rv.	2sl (2pr).;pyt.;dg.;ch.
Songadh; 3-0	Songadh; 3-0; Sun.	Songadh; 3-0	w.	sl (lokshala).
Madhi; 12-4	Kukanbanda; 2-4; Thu.	Valod; 3-4	w.;rv.	
Udwada; 6-0	Rohina; 1-4; Thu.	Paria; 2-0	w.;t.	sl (pr).; pyt.
Surat; 12-0	Surat; 12-0; Sat.	Local;	w.	sl (pr).; pyt.; 3cs. (6 c).; fr (Ct. Sud 14).; mq.; 2dg.; ch.; dp.
Surat; 1-4	Surat; 4-0; Sat.	Local;	w.	2tl.; dh.

Sr. No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati; 1	Direction; Travelling distance from Taluka/peto Hq. 2	Area (Sq. miles); Poppulation; Households; Agricultural Population. 3	Post office; Distance in miles. 4
509	Duṅgar KMJ.; ડુંગર	NE; 10-0	0.6; 437; 91; 380	Kamrej; 4-0
510	Duṅgarā KMJ.; ડુંગરા	E; 3-0	2.7; 1145; 245; 929	Kamrej; 4-0
511	Duṅgarā PRD.; ડુંગરા	N; 16-0	1.7; 1625; 355; 1074	Vapi; 5-0
512	Dungaraḍā VRA.; ડુંગરડા	S; 28-0	1.0; 81; 27; 81	Unai; 9-0
513	Duṅgaragām VAR.; ડુંગરગામ	N; 4-0	1.5; 429; 72; 423	Vyara; 4-0
514	Duṅgarī BRL.; ડુંગરી	E; 11-4	3.1; 2589; 508; 1414	Local;
515	Duṅgarī PRD.; ડુંગરી	S; 3-0	3 7; 2525. 498; 2185	Local;
516	Duṅgarī MGL.; ડુંગરી	S; 5-0	1 3; 981; 168; 954	Wankal; 12-0
517	Duvāḍā GND.; દુવાડા	E; 3-4	1.9; 321; 62; 123	Gandevi; 3-0
518	Ekalerā CRS.; એકલેરા	SW; 8-0	0.8; 445; 103; 420	Local;
519	Ekalerā DRP.; એકલેરા	S; 25-0	2.4; 244; 43; 244	Dharampur; 25-0
520	Ekal-Khāmbh SGD., એકલખાંભ	NE; 20-0	0.2; 43; 9; 37	Navapur; 15-0
521	Ekavā-Gholan SGD.; એકવા-ઘોલણ	S; 18-0	7.0; 39; 6; 39	Songadh; 18-0
522	Enā PLN; એના	E; 3-4	2.0; 1979; 354; 1517	Local;
523	Endaragotā BLR.; એંદરગોટા	SW; 8-4	1.3; 481; 103; 469	Dungri; 2-0
524	Enthal GND.; એંથળ	E; 5-0	4.0; 2713. 531; 2368	Local;
525	Erathāṇ OPD., એરથાણ	NE; 7-0	2 0. 671; 113, 582	Sandhier; 2-0
526	Erathāṇ PLN., એરથાણ	NW; 3-0	1 1; 550; 110; 448	Baleshwar; 1-4
527	Erū NVR.; એરૂ	SW; 4-0	2 3. 2451; 526; 1007	Local.
528	Ethāṇ NVR.; એથાણ	SW. 7-0	1.0; 274; 56; 231	Jalalpore. 3-4
529	Faḍavel CKL.; ફડવેલ	E; 8-0	5 0; 1825; 356; 1823	Local;
530	Faladhārā BLR.; ફલધરા	E; 15-0	5.0; 2393; 429; 2289	Vankal; 4-0
531	Falī DRP.; ફલી	SE; 31-0	2.0; 282; 56; 282	Dharampur; 31-0
532	Falī MDV., ફલી	W; 10-0	1.7; 390; 55. 390	Mandvi; 10-0
533	Fanasawāḍā BLR.; ફનસવાડા	NE; 7-0	1.3; 585; 117; 574	Ghadoli; 3-0
534	Fattepur DRP.; ફતેપુર	S; 27-0	2 0; 858; 166; 845	Dharampur; 27-0

Railway St.; Distance. 5	Weekly Bazar; Distance; Bazar Day. 6	Motor Stand; Distance. 7	Drinking water facilities 8	Institutions and other information. 9
Sayan; 10-0	Surat; 14-0; Sat.	Sevani; 2-0	w.	pyt.; 2tl.; dg.; dp.
Sayan; 10-0	Surat; 14-0; Sat.	Local;	w.rv.	sl (pr).; pyt.; cs.; tl.; dg.; ch.; lib.; dp.
Vapi; 5-0	Chhibhadka-chh; 4-0; Sun,	Local;	w.t. rv.	sl(pr).; pyt.; cs.; (c).; tl.; ch.
Local;	Raighad; 2-0; Sat.		rv.	
Vyara; 4-0	Vyara; 4-0; Sat.	Valod; 4-0	w.	sl (lokshala).; pyt.
Local;	Local;	Local;	w.	sl (pr).; pyt.; cs; (c).; tl.; dg.; dh.; ch.; 3dp.;
Udwada; 4-0	Udwada; 4-0; Tue.	Paria; 2-0	w.	2sl (2pr).; pyt.; tl.
Mangrol; 5-0	Wankal; 12-0; Fri.	Local;	w.	sl (pr).; pyt.; cs.; ch
Chikhali road4-0	Gandevi; 3-0; Wed.	Endhal; 0-6	rv.t.	pyt.; Metal Quarries.
Bhestan; 1-4	Surat; 7-0; Sat.	Bhestan; 2-0	w.	sl (pr).; mq.
Bulsar; 45-0	Sildhan; 2-0, Sat.	Dharampur; 25-0	p.	sl (pr).
Navapur15; -0	Navapur, 15 0, Sat.	Navapur; 15-0	rv.	
Songadh; 18-0	Songadh, 18-0, Sun	Songadh, 18-0	rv	
Gangadhra; 3-0	Gangadhra; 3 0.	Local.	w	2sl (pr, m).; pyt.; 2cs. (2c).; 2tl.; dh.; dp.
Dungri. 2 0	Dungri, 2-0	Dungri, 2 0	w.	sl (pr).; cs.; (c).
Chikhali, 3-0 Road	Gandevi, 4 0 Wed	Local;	w.	sl (pr).; pyt.; cs.; (mp).; fr (An. Vad. 14).; tl.; dg.; dh.; lib.; 2dp.
Sayan; 5-0	Surat, 17-0; Sat.	Takarma; 2-4	w.	sl (pr).; pyt.; cs. (mis).; tl.; dg.; ch.; lib.; dp.
Chalthan; 2-0	Chalthan; 2-0;	Baleshwar; 1-4	w.	sl (pr).; pyt.; tl; ch.; lib.
Navsari; 2-4	Navsari; 2-4, Sun.	Local;	w.	Sl (2pr).; pyt.; fr (Ct; Sud 15) Goddess Maha Laxmi 3tl.; dh; ch.; 3dp
Navsari; 6-0	Jalalpore; 3-4;	Bhutsad; 1-0	w.	sl (pr) tl.; lib.
Rankuwa; 6-0	Local; Fri.	Local;	w.rv.	2sl (2pr).;pyt.;cs. (c).; fr (An Vad 14).; 3tl.; dg.; ch.; lib.
Bulsar; 18-0	Local; Sun.	Vankal; 2-4	w.rv.	2sl (2pr).; pyt.
Bulsar; 53-0	Huda, 4-0; Tue.	Dharampur; 31-0	p.	
Vankal; 10-0	Amba; 4-0; Sat.	Zab; 2-6	w.	sl (Lokshala) cs.
Bulsar; 6-0	Bulsar; 6-0;	Kalawad; 1-2	w.	sl (pr).; cs.; (c).
Bulsar; 47-0	— — —	Rakholi; 5-0	w.p.	sl (pr).

Sr. No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati. 1	Direction; Travelling distance. from Taluka peta Hq. 2	Area (Sq. miles.); Population Households; Agricultural Population. 3	Post office; Distance, in miles 4
535	Fulapaḍā CRS.; ફુલપાડા	NE; 2-4	1.3; 1909; 484; 284	Local;
536	Fulaumarāṇ SGD.; ફુલઉમરાણ	NE;	0.2; 109; 16; 102	Khandbara; 6-0
537	Fulawāḍī DRP.; ફુલવાડી	SE; 6-0	2.6; 460; 97; 440	Dharampur; 6-0
538	Fulawāḍī MHW.; ફુલવાડી	N; 7-0	1.1; 369; 61; 331	Mandvi; 7-0
539	Fulawāḍī Mhw.; ફુલવાડી	W; 3-0	1.2; 542; 98; 541	Mahuwa; 4-0
540	Gabheṇī CRS.; ગભેણી	S; 12-6	9.6; 1115; 253; 387	Bhestan; 2-0
541	Gaḍakāch MGL.; ગડકાછ	E; 2-0	1.0; 164; 33; 97	Mangrol; 2-0
542	Gāḍariā BLR.; ગાડરીઆ	E; 8-0	2.9; 1158; 234; 986	Ranvel; 1-4
543	Gaḍat GND.; ગડત	N; 3-4	1.2; 1453; 317; 668	Local;
544	Gaḍat VRA.; ગડત	SW; 11-0	4.5; 1427; 267; 1377	Buhari; 3-0
555	Gaḍī DRP; ગડી	E; 24-0	1.9; 313; 65; 305	Dharampur; 24-0
546	Gālakhaḍī S.DG; ગાલખડી	NW. 5-0	0.8; 139; 26; 139	Songadh; 5-0
547	Gāḷakuvā SGD.; ગાળકુવા	SW. 8-0	2.1; 650; 105; 646	Songadh; 8-0
548	Gāma-Taḷāv (Bujarag) Mdv.; ગામતળાવ (બુજરંગ)	W; 4-0	0.8; 530; 94; 422	Godsamba; 1-4
549	Gāma-Taḷāv (Khūrad) Mdv.; ગામતળાવ ખૂરદ)	N; 5-0	1.2; 218; 38; 217	Mandvi; 5-0
550	Gaṇadevā GND.; ગણદેવા	E; 6-0	6.0; 3384; 659; 2616	Local;
551	Gaṇadevī GND.; ગણદેવી	Taluko Head quarters.	4.6; 9948; 1920; 942	Local;
552	Ganavā DRP.; ગનવા	E; 18-0	2.0; 171; 36; 169	Dharampur; 18-0
553	Gāṅgaḍiā MHW; ગાંગડીઆ	S; 15-0	3.0; 995; 154; 949	Kharoli; 2-0
554	Gāṅgapor PLN.; ગાંગપોર	E; 7-0	0.1; 945; 179; 813	Gangadhara; 1-0
555	Gāṅgapur VRA.; ગાંગપુર	SE; 14-0	0.8; 394; 86; 394	Buhari; 0-4
556	Gaṅgāpor-Devagaḍh MDV.; ગંગાપોર દેવગઢ	N; 10-4	3.3; 118; 17; 110	Zankhvav; 6-4

Railway St.; Distance.	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance.	Drinking water facilities	Institutions and other information.
5	6	7	8	
Utran; 1-0	Surat; 2-0; Sat.	Bhestan 3-0	w.	sl (pr).; pyt.; fr (Kt. Sud 2, 9, 11, 15, Ct. Sud 15).; 21tl.; 4M.; mq.; dg.; 10dh.; gym.; ch.; lib.; dp.
Khandbara; 6-2	Khanabarb; 6-0; Sun	Khandbaru; 6-0	rv.	sl (pr).
Bulsar ; 25-0	Nani-Vahiyal; 2-0; Thu.	Dharampur; 6-0	rv.,p.	
Zankhavav; 7-0	Devgadh; 2-0; Thu.	Local;	w.,n.	sl(lokshala).
Bardoli; 12-0	Dholikui; 1-0; Sun.	Local;	w.	sl (pr).; pyt.
Sachin; 6-0	Surat; 9-0; Sat.	Bhestan; 3-0	w.,p.	sl (pr).; tl.; mq.; ch.
Mangrol; 2-0	Wankal; 5-0; Fri.	Mosali; 2-0	w.	mq.
Bulsar; 7-4	Navera; 1-0; Sun.	Local;	w.,t.	sl(pr).; pyt.; ch.
Bilimora; 5-0	Gandevi; 4-0; Wed.	Local;	w.,rv.	2sl(pr.,h).; pyt.; 2cs. (c., mis.).; fr (Kt Sud 15).; 3tl.; dh.; 4dp.
Vyara; 11-0	Buhari; 3-0; Wed.	Local;	w.	
Bulsar; 42-0	Umarthana; 3-0; Sun.	Dharampur;24-0	w.,rv., P.	sl(pr).; pyt.; 2cs. (2c.).; ch.; dp.; cch.
Songadh; 5-0	Songadh; 5-0; Sun.	Songadh; 5-0	rv.,w.	sl (Lokhsala).
Dosawada; 3-0	Bandharpada Mota; 1-0; Mon.	Vyara; 8-0	w.	sl(pr).; pyt.; 2cs. (c., mp.).; tl.; lib.
Madhi; 13-0	Amba; 3-0; Sat.	Amalsadi; 0-6	w.	sl(pr).; tl.; dg.
Zankhav; 11-0	Mandvi, 5-0; Wed.	Mandvi; 5-0	w.	
Chikhali Road.; 5-0	Local; Wed.	Local;	w.,t.	3sl(pr.,m.,h.).; pyt.; cs. (c.).; fr (Kt Sud 15).; 4tl.; 2M.; dg.; ch.; lib.; 2dp.
Local;	Local; wed.	Local;	w	
Bulsar; 36-0	Bopi; 4-0; Fri.	Dharampur;18-0	P.,str.	3sl(2pr.,h).; mun.; 2cs. fmg.,c.).; fr (An Sud 10).; 8tl.; 8mq.; 10dg.; dh.; ch.; 2lib.; 7dp.
Dholikuwa; 2-4	Local; Mon.	Kharoli; 1-4	w.	sl(pr.); pyt; cs.(c.); fr (An.Vad, 14); 3tl; ch.
Gangadhra; 1-0	Gangadhara; 1-0;	Bardoli; 3-0	w.	
Madhi; 10-0	Buhari ; 0-4; Wed.	Buhari; 0-4	w.,rv.	sl(pr); pyt; tl; ch; lib.
Zankhvav; 6-4	Devgadh; 3-0; Thu	Devgadh 2-4	w	Sl(pr); pyt.

Serial No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati. 1	Direction; Travelling distance. from Taluka/peta Hq. 2	Area (Sq. ms.); Population; Households; Agricultural Population. 3	Post office; Distance. in miles 4
557	Gaṅgāpor-Harṣad MDV.; ગંગાપોર હર્ષદ	NE; 8-0	1.3; 266; 38; 266	Mandvi; 7-0
558	Gaṅgapur BNS.; ગંગાપુર	S; 4-0	1.7; 727; 155; 725	Bansda; 4-0
559	Gāṅgavā CRS.; ગાંગવા	E; 9-0	..............deserted	....
60	Gaṅghor GND.; ગંઘોર	W; 3-0	0.4; 445; 80; 262	Kachholi; 1-0
61	Gārapāṇī VRA.; ગારપાણી	SW; 23-0	1.0; 121; 23; 121	Unai; 2-0
62	Gāravaṇ VRA.; ગારવણ	SE; 17-0	1.0; 272; 54; 272	Buhari; 4-0
63	Gatāḍī SGD.; ગતાડી	SW; 9-0	0.9; 248; 43; 237	Songadh; 9-0
64	Gaurī CKL.; ગૌરી	SE; 13-2	0 8; 572; 107; 572	Dharampur; 5-0
65	Gavāchī MDV.; ગવાછી	W; 9-0	1.6; 671; 128; 662	Mandvi; 9-0
66	Gavāṇ SGD.; ગવાણ	SE; 29-0	0.8; 294; 47; 277	Chinchpada; 10-0
67	Gavīyar CRS.; ગવીયર	SW; 7-6	1.6; 238; 60; 229	Bhimpor; 3-0
68	Gāyasāṅvar SGD.; ગાયસાંવર	S; 4-0	1.0; 175; 20; 175	Songadh; 4-0
69	Ghāḍavī DRP.; ઘાડવી	S; 48-0	1.1; 129; 24; 129	Rumala; 4-0
70	Ghaḍoch BLR.; ઘડોછ	E; 4-4	1.9; 939; 193; 914	Local;
71	Ghaḍoi MHW.; ઘડોઈ	S; 7-0	1.5; 719; 123; 713	Satem; 1-4
72	Ghalā KMJ.; ઘલા	E; 4-0	8.3; 1966; 543; 1503	Kamrej; 4-0
77	Ghaluḍā PLN.; ઘલુડા	E; 3-0	0.1; 181; 30; 169	Palsana; 3-0
76	Ghaluḍī KMJ.; ઘલુડી	NW; 3-0	1.5; 308; 60; 290	Kathor; 4-0
75	Ghāṇaveri DRP.; ઘાણવેરી	S; 45-0	1.8; 166; 25; 166	Dharampur; 45-0
74	Ghāṇāwaḍ MGL.; ઘાણાવડ	E; 33-0	1.8; 927; 119; 856	Umerpada; 3-0
73	Ghāñcikuvā SGD.; ઘાંચીકુવા	S; 6-0	0.8; 172; 32; 172	Songadh; 6-0
78	Ghāṇi VRA.; ઘાણી	SW; 20-0	2.8; 591; 115; 549	Buhari; 2-0
79	Ghānsīāmedhā SGD.; ઘાંસીઆમેઢા	N; 15-0	1.8; 649; 116; 589	Songadh; 15-0
80	Ghanṭolī MDV.; ઘંટોલી	N; 3-0	4 9; 1445; 247; 1434	Mandvi; 3-0
81	Ghāṭā VRA;; ઘાટા	N; 8-0	2.5; 757; 147; 688	Vyara; 8-0
852	Ghej CKL.; ઘેજ	S; 7-2	6.5; 2945; 581; 2918	Local;
583	Ghekaṭi CKL.; ઘેટી	W; 5-0	0.5; 713; 141; 516	Waghreech; 2-4
584	Gheriāvāv VRA.; ઘેરીઆવાવ	SW; 8-0	1.5; 451; 75; 434	Buhari; 3-8

Railway St.; Distance.	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance.	Drinking water facilities	Institutions and other information.
5	6	7	8	9
Madhi; 17-0	Mandvi; 7-0; Wed.	Kakdapar; 4-0	w.	fr (Mg Sud 15) Goddess harshadi.; tl.
Unai; 11-0	Limzar; 2-0; Sun.	Bansda; 4-0	w.,t., rv.	sl(pr).; pyt.
....	....	deserted;	....	....
Amalsad; 3-0	Sari Bujarang; 3-0;	Dhamada-chha.; 0-4	w.	sl(pr).; pyt.; 2tl.; lib.
Unai; 2-0	Unai; 2-0; Tue.	Unai; 2-4	w.	pyt.
Unai; 7-0	Balpur; 2-0; Mon.	Gadat; 6-0	w.,rv.	
Doswada; 5-0	Bandharpada; 1-0; Mon. Mota.;	Songadh; 9-0	w.	sl(pr).
Bulsar; 15-0	Khergam; 3-0;	Khergam; 3-0	w.,rv.	2Sl(pr., lokshala).; 2tl.
Madhi; 14-0	Amba; 1-0; Sat.	Areth; 2-4	w.,rv.	sl(pr).
Chinchpada; 10-0	Chinchpada; 10-0; Thu.	Chinchpada; 10-0	w.	sl (lokshala).
Surat; 7-0	Surat; 7-0; Sat.	Local;	w.,P.	sl(pr).; tl.; ch.
Songadh; 4-0	Songadh; 4-0; Sun.	Songadh; 4-0	w.	sl(pr).; pyt.
Bulsar; 22-0	Mandav Khadak; 1-0;	Dharampur; 48-0	rv.,n.	sl(pr).; pyt.; cs.(c).; fr (Mg Vad 13).; tl.
Bulsar; 4-0	Bulsar; 4-0;	Gundala; 1-0	.w,rv.	
Navsari; 15-0	Kharvan; 2-0; Sat.		w.	sl(pr).; pyt.; ch.; lib.
Sayan;; 10-0	Surat;; 14-0, Sat.	Dhatawa; 2-0	rv.	2Sl (2pr).; pyt.; cs; (c).; fr (An,Sud, 10).; 7te.; 3mq. 7dg.; dh.; ch.; 2lib.; 5dp.
Gangadhara; 3-0	Gangadhra; 3-0;	Local;	w.	tl.; dh.
Sayan; 3-4	Surat; 11-0; Sat.	Sayan; 3-4	w.	pyt.; 2cs.; (2mis).
Bulsar; 63-0	Ozar; 7-0;; Thu.	Dharampur. 45-0	rv.,n.	
Umerpada; 3-0	Umerpada; 3-0		w.	sl (pr).; pyt.; cs.
Songadh; 6-0	Songadh; 6-0; Sun.	Songadh; 6-0	w.	
Unai; 6-0	Buhari; Wed.	Buhari; 2-0	w.	sl (pr).; pyt.; csl.; (c)ib.
Vyara; 11-0	Satkul; 3-0; Fri.	Kakadapar; 6-0	rv.,n.W.	sl (pr).; pyt.; cs.; (fmg); lib. (mob).
Madhi. 9-0	Mandavi; 3-0 Wed	Mandvi. 4-0	w.	3Sl (3pr).; pyt.; tl.; ch.; dp.
Vyara; 8-0	Vadkui; 3-0; Tue.	Ratania; 1-0	w.	sl (pr).; pyt.; 2tl.; ch.
Dungri; 8-0	Vad; 4-0; Wed.	Chikhal; 6-0	w.	sl (pr).; pyt.; cs.; (c).; fr (Srn. last Saturday) tl.
Bilimora ..	Tomora; 2-0	Bilimora; 1-0	w.	sl (pr).; cs.; (c).; dg.
Vyara; 8-0	Buhari; 3-0; Wed	Buhari; 3-0	w.	pyt.

Sr. No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati; 1	Direction; Travelling distance from Taluka peta H.Q. 2		Area (Sq. miles); Population; Households; Agricultural Population. 3				Post office; Distance in miles. 4	
585	Ghoḍā SGD.; ઘોડા	N;	5-0	2.4;	599;	104;	577	Songadh;	5-0
586	Ghoḍacīt SGD.; ઘોડચીત	S;	10-0	1.5;	461;	72;	449	Songadh;	10-0
587	Ghodamāl BNS.; ઘોડમાલ	SW;	5-0	6.7;	1086;	242;	1083	Bansda;	5-0
588	Ghoḍīrūvāḷī SGD.; ઘોડીરૂવાળી	S;	12-0	1.1;	107;	21;	107	Songadh;	12-0
589	Gholaṇ SGD.; ઘોલણ	SE;	26-0	0.7;	28;	5;	28	Navapur;	16-0
590	Gholār CKL.; ઘોલાર	SE;	6-0	3.0;	1047;	204;	1047	Rumla;	3-0
591	Ghoṭaṇ DRP.; ઘોટણ	SE;	28-0	2.9;	287;	50;	287	Dharampur;	28-0
592	Ghoṭawaḷ DRP.; ઘોટવળ	S;	44-0	1.1;	88;	24;	88	Dharampur;	44-0
593	Ghusaragām SGD.; ઘુસરગામ	S;	34-0	1.7;	239;	37;	232	Navapur;	16-0
594	Ghuṭavel SGD.; ઘુટવેલ	S;	15-0	1.7;	268;	41;	267	Songadh;	15-0
595	Gījaram MGL.; ગીજરમ	NW;	3-0	1.9;	804;	178;	437	Mangrol;	3-0
596	Gīranārā DRP.; ગીરનારા	SE;	34-0	4.8;	643;	118;	643	Dharampur;	34-0
597	Goḍabār MGL.; ગોડબાર	E;	10-0	3.7;	812;	148;	811	Wankal;	6-0
598	Goḍādarā CRS.; ગોડાદરા	SE;	5-4	1.1;	333;	69;	226	Dindoli;	1-0
599	Goḍadhā MDV.; ગોડધા	N;	6-0	2.3;	875;	153;	784	Mandvi;	6-0
600	Goḍadhā VLD.; ગોડધા	NW;	5-1	1.0;	524;	90;	519	Buhari;	3-0
601	Goḍasambā MDV.; ગોડસંબા	W;	5-0	1.0;	592;	106;	495	Local;	
602	Goḍathal CKL. ગોડથલ	SE;	15-4	4.6;	2509;	417;	2417	Local;	
603	Goḍavaṇī CKL.; ગોડવણી	SE;	17-0	1.7;	696;	121;	696	Dharampur;	12-0
604	Godāwāḍī MDV. ગોદાવાડી	W;	6-4	2.9;	1504;	273;	1389	Kadod;	2-0
605	Godhābārī BNS. ગોધાબારી	E;	3-0	1.8;	468;	90;	468	Bansda;	4-0
606	Goimā PRD. ગોઈમા	S;	9-0	6.2;	2603,	499;	2482	Local;	
607	Gojā CRS; ગોજા	E;	7-0	0.7;	124;	29;	111	Kharvasa;	2-0
608	Gojī BRD. ગોજી	S;	3-2	1.7;	514;	110;	485	Nizar;	0-6
609	Golā OPD. ગોલા	NE;	3-2	1.7;	232,	47;	180	Olpad;	3-0
610	Golan VLD. ગોલન	N;	3-2	3.2;	849;	153;	847	Valod;	3-0
611	Gondaliā MGL. ગોંદલીઆ	E;	22-0	1.5;	88;	13;	88	Umerpada;	6-0
612	Gopalā MHW.; ગોપલા	S;	6-0	1.9;	531,	95;	513	Satem;	0-6
613	Gopālapurā SGD. ગોપાલપુરા	S;	8-0	2.0;	360;	54;	360	Songadh;	8-0
614	Gopāliā MGL. ગોપાલીઆ	E;	25-0	0.3;	32;	5;	32	Umerpada;	0-4
615	Goragām BLR. ગોરગામ	N;	9-4	3.7;	1484;	283;	1426	Local;	
616	Gorakhaḍā DRP. ગોરખડા	E;	12-0	1.7;	227;	43;	227	Dharampur;	12-0

Railway St.; Distance.	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance.	Drinking water facilities	Institutions and other information.
5	6	7	8	9
Songadh; 5-0	Songadh; 5-0; Sun.	Songadh; 5-0	w.,rv.	sl (pr).; pyt.; cs.
Doswada; 5-0	Bandharpada Mota; 1-0; Mon.	Songadh; 10-0	w.	sl (pr).; cs.
Unai; 15-0	Limzar; 4-0; Sun.	Bansada; 5-0	w.,rv. str.	sl (pr).
Songadh; 12-0	Bandharpada Mota; 4-0; Mon.	Songadh; 12-0	w.	
Navapur; 16-0	Singana; 1-0; Tue.	Virthava; 0-4	w.	
Bilimora;	Chikhali; 6-0;	Chikhali; 6-0	w.,rva.	Sl (pr).; tl.
Bulsar; 40-0	Huda; 6-0; Tue.	Dharampur;28-0	P.	
Bulsar; 62-0	Varwath; 8-0; Sun.	Dharampur;44-0	P.	
Navapur; 16-0	Singana; 10-0; Tue.	Charangam ; 1-0	w.,rv.	sl (pr).; (lokshala).
Songadh; 15-0	Umarada; 3-0; Tue.	Songadh; 15-0	w.,rv.	sl (pr).; pyt.
Simodra; 3-0	Mangrol; 3-0;	Mangrol; 3-0	w.r,v.	sl (pr).; tl.; Mahadev. mg.; dg.; lib.
Bulsar; 52-0	Huda; 2-0; Tue.	Dharampur; 34-0	P.	
Zankhvav; 2-0	Zankhuvav; 2-0;	Zankhuav; 2-0	w.,n.	sl (lokshala).; pyt.; cs.; (c).; ch.
Udhna; 2-0	Surat; 6-0; Sat.	Magob; 2-0	w.	2sl (pr).; tl.; ch.; dp.
Zankhavav;11-0	Mandvi; 6-0; Wed.	Mandvi; 6-0	w.,rv.	sl (pr).; pyt.
Madhi, 14-0	Buhari; 3-0, Wed.	Buhari; 3-0	w.	sl (pr).; tl.; dp.
Madhi; 14-0	Amba; 2-0; Sat.	Local;	w.	sl.; pyt.; cs.(mp.).; dp.
Bilimora; 19-	Khergam; 7-0;	Fadwel; 7-0	w.,rv.	3sl(pr., 2Lokshala).; pyt.; 2tl.
Bilimora; 19-0	Dharampur; 12-0; Mon.	Fadwel; 6-0	w.,rv.	s (pr) ; pyt.; tl.
Madhi; 7-0	Kadod; 2-0; Sun.	Bori; 2-0	w.	sl(m).; pyt.; cs.(mp.).; tl.; ch.
Kevdi Road;2-0	Bansda; 4-0; Fri.	Bansda; 3-0	w.,rv.	sl(pr).; tl.; dg.
Udwada; 8-4	Rohina; 1-0; Thu.	Vaghchhipa.3-0	w.,rv., t.	sl(pr).; pyt.; tl.; dg.
Niol; 3-4	Surat; 11-0; Sat.	Althan; 3-0	w.	tl.
Bardoli; 5-0	Mahuwa; 4-4; Mon.	Local	w.,t.	sl(pr).; tl.
Sayan; 6-0	Surat; 17-0; Sat.	Aandhi; 1-0	w.	2tl.
Madhi; 13-0	Buhari; 3-0; Wed.	Local	w.	sl(pr).; ch.
Keori; 3-0	Keori; 3-0, -	—	w.	
Navsari; 15-0	Kharvan; 2-0; Sat.	Kharvan; 2-0	rv.	Sl(pr).; pyt.; mq.; dg.
Songadh; 8-0	Songadh; 8-0; Sun.	Songadh; 8-0	w.,rv.	2sl (lokshala).; pyt.
Umerpada; 0-4	Umerpada; 0-4;		w.	
Dungri; 4-0	Dungri; 4-0;	Vaghaldhara;1-4	w.	sl(2pr).; pyt.; cs.(c).; tl.; dp.
Bulsar; 30-0	RajpuriJungle; 1-0; Thu.	Dharampur;12-0	rv.,str.,p	

Serial No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati; 1	Directon; Travelling distance from taluka/ or peta H. Q. 2		Are (Sq. miles); Population; Households; Agricultural Population. 3				Post office; Distance in miles.	
617	Gorawāḍā BLR.; ગોરવાડા	E;	4-0	0.6;	383;	81;	320	Ghadoi;	0-1
618	Gosarāḍā BRD.; ગોસરડા	S;	7-0			deserted ...		....	
619	Gotasā BRD.; ગોતાસા	S;	3-0	0.7;	198;	38;	198	Bardoli;	3-0
620	Gothāṇ OPD.; ગોથાણ	E;	11-4	2.5;	970;	197;	822	Local;	
621	Goṭiā PLN.; ગોટીયા	E;	6-0	0.5;	87;	17;	87	Ena;	1-0
622	Govālak CRS.; ગોવાલક	S;	2-0	0.6;	45;	15;	45	Udhna;	1-0
623	Govaṭ MGL.; ગોવટ	E;	25-0	0.6;	295;	44;	295	Umerpada;	1-0
624	Gunakhaḍī SGD.; ગુનખડી	SE;	10-0	1.5;	389;	62;	387	Songadh;	10-0
625	Guṇsasadā SGD.; ગુણસદા	N;	2-0	4.7;	775;	138;	766	Songadh;	2-0
626	Guṇasavel MHW.; ગુણસવેલ	SE;	7-0	2.4;	1228;	209;	918	Jervavia;	2-0
627	Gundalāv BLR.; ગુંદલાવ	E;	3-0	1.7;	512;	115;	447	Dhamdachi;	1-4
628	Gundavāṇ MDV.; ગુંદવાણ	E;	8-0		....	.deserted		....	.
629	Gundī SGD.; ગુંદી	NE;	10-0	0.3;	75;	12;	71	Songadh;	10-0
630	Gundīa DRP.; ગુંદીઆ	E;	22-0	2.[illegible];	260;	48;	260	Dharampur;	22-0
631	Gundikuvā MGL.; ગુંદીકુવા	E;	13-0	0.8;	247;	40;	246	Wankal;	7-0
632	Gunṭī MGL.; ગુંટી			1.7;	208;	40;	206	Velacha;	3-0
633	Gyāsapur OPD.; ગ્યાસપુર	E;	14-1		. ....	.deserted		.. . ...	.
634	Haladharu KMJ.; હલધરુ	S;	9-2	2.7;	1388;	264;	1051	Local;	
635	Haḷadhavā MHW.; હળધવા	S;	13-0	2.0;	963;	180;	916	Anaval;	6-0
636	Haladharī MGL.; હલધરી	E;	44-0	1.7;	206;	28;	205	Umerpada;	10-0
637	Halamuḍī VRA.; હલમુડી	S;	29-0	1.0;	88;	19;	88	Unai;	11-0
638	Hanamantamāḷ DRP.; હનમંતમાળ	E;	15-0	3.7;	910;	196;	907	Dharampur;	15-0
639	Hanamatīā SGD.; હનમતીયા	SW;	13-0	1.4;	385;	64;	358	Vyara;	5-0
640	Hānsāpor NVR.; હાંસાપોર	SW;	5-0	1.6;	1301;	266;	897	Local;	
641	Hanumānabārī BNS.; હનુમાનબારી	N;	2-0	0.7;	506;	108;	197	Bansda;	2-0
642	Haraṇagām CKL.; હરણગામ	E;	8-2	2.6;	1622;	358;	1427	Local;	
643	Harasaṇī MGL.; હરસણી	NE;	2-0	1.4;	666;	114;	662	Mangrol;	2-0
644	Harīā BLR.; હરીઆ	S;	7-0	1.4;	1131;	224;	802	Local;	
645	Harīpurā PLN.; હરીપુરા	SE;	8-0	0.1;	427;	76;	312	Ubhel;	1-0
646	Harīpurā MGL.; હરીપુરા	...	...	0.4;	18;	1;	18	Umerpada;	16-0
647	Harīpurā VRA.; હરીપુરા	SE;	22-0	2.3;	166;	30;	159	Buhari;	7-0

Railway St.; Distance.		Weekly Bazar; Distance; Bazar Day.			Motor Stand; Distance.		Drinking water facilities	Institutions and other information.
5		6			7		8	9
Bulsar	4-0	Bulsar	0-4		Local		W.,t.	cs.(c).; tl.; dg.
					deserted			
Bardoli	3-0	—	—		Ahwa ;	1-0	w.	
Sayan	1-4	Surat	10-0 ;	Sat.	Sayan ;	1-4	w.	2sl(2pr).; pyt.; 4tl.; dh.; ch.; lib.
Gangadhra	1-0	Gangadhra	1-0 ;		Palsana ;	6-0	w.	tl.
Udhna	2-0	Surat	2-0 ;	Sat.	Udhna ;	1-0	o.	dg.
Umerpada	1-0	Umerpada	1-0 ;		—		w.	
Songadh	10-0	Umarada	1-4 ;	Tue.	Songadh ;	10-0	w.,rv.	sl(pr).; pyt.
Songadh	2-0	Songadh	2-0 ;	Sun.	Songadh ;	2-0	w.	sl (lokshala).; pyt.; ch.
Anaval	10-0	Kharvan	4-0 ;	Sat.	Local (*Ex-*cept Monsoon); Vanskui. ;	1-0	w.,t.	sl(pr).; cs.(c).; tl.; dp.
Bulsar	3-0	Bulsar	3-0 ;		Local ;		w.,t.	sl(pr).
					deserted			
Songadh	10-0	Songadh	10-0 ;	Sun.	Songadh ;	10-0	rv.	
Bulsar	40-0	Baria	12-0 ;		Dharampur;	22-0	p.,rv.	sl(pr); tl.
Zankhvav	2-0	Zankhvav	2-0 ;		Zankhvav ;	1-0	w.	sl (lokshala).
Velacha	3-0	Velacha	3-0;		Tadkeshwar ;	4-0	w.,p., rv.	
					deserted			
Gangadhra	1-0	Bardoli	4-0 ;	Sat.	Ubhel ;	4-0	w.,t.	sl(pr).; pyt.; 3cs.(3c).; 2tl.;mq.; dg.; lib.; dp;
Anaval	6-0	Valvada	2-0 ;	Sun.	Local ;		w.	sl(pr).; pyt.; 2cs.(c.,mp); lib.
Umerpada	10-0	Umerpada	10-0 ;		Umerpada.	10-0	w.	cs.
Kalamba	1-0	Raighad	1-0 ;	Sat.	—		w	
Bulsar	33-0	Rajpuri Jungle	5-0 ;	Thu.	Dharampur	15-0	rv.,str. p.	
Vyara	5-0	Vyara	5-0 ;	Sat.	Vyara ;	5-0	w.,rv.	pyt.
Navsari	3-0	Navsari	4-0 ;	Sun.	Local ;		w.	sl(pr).; pyt.; tl.
Unai	5-0	Bansda	2-0 ;	Fri.	Local ;		w.,rv.	sl(pr).; tl.; ch.
Rankuva	2-0	Rankuva	2-0 ;		Rankuva .	2-0	w.	2sl(2pr); pyt; cs.(mq.); fr (Kt. Sud. 14).; tl.; mq.; dg.; lib.
Mangrol	2-0	Mangrol Wankal	2-0; 6-0	Fri.	Mangrol ;	2-0	w.	sl (lokshala); pyt.
Pardi	1-0	Sukhlav	3-0 ;	Fri.	Parnera ;	2-4	w.,t.	sl(pr); 3tl.; ch; dp.
Chalthan	3-0	Surat	6-0 ;	Sat.	Kadodara ;	1-0	w.	tl.; dg.
Umerpada	16-0	Umerpada	16-0 ;					
Unai	6-0	Bhenskatri	3-0 ;	Sun.	Unai ;	7-0	w.	pyt.

Serial No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati. 1	Direction; Travelling distance. from taluka or peta H.Q 2	Area (Sq. miles.); Population; Households; Agricultural Population. 3	Post office; Distance in miles. 4
648	Harīpurā-Kāṇoghāṭ MDV.; હરીપુરા કાણોઘાટ	E; 9-0	2.0; 105; 13; 105	Zankhvav; 16-0
649	Hasanapor OPD.; હસનપોર	S; 2-4	............deserted ...	....
650	Hathanabārī DRP.; હથનબારી	E; 16-0	1.4; 185; 41; 185	Dharampur; 16-0
651	Hāṭhīsā OPD.; હાઠીસા	W; 2-0	1.2; 160; 33; 158	Olpad; 2-0
652	Hathoḍā MGL.; હથોડા	W; 13-0	3.5; 1315; 270; 1017	Velachha; 1-4
653	Hāthukā VLD.; હાથુકા	S; 4-0	1.3; 743; 154; 661	Buhari; 3-0
654	Hathuraṇ MGL.; હથુરણ	W; 18-0	6.2; 1774; 381; 1276	Local;
655	Hedalabārī DRP.; હેદલબારી	S; 22-0	1.2; 58; 11; 58	Dharampur; 22-0
656	Hedarī DRP.; હેદરી	E; 33-0	1.8; 133; 20; 133	Dharampur; 33-0
657	Hīndalā SGD.; હીંદલા	S; 20-0	1.1; 155; 22; 151	Songadh; 20-0
658	Hīnḍholīā BRD.; હીંઢોલીઆ	W; 5-0	0.8; 136; 29; 125	Vakaner; 3-0
659	Hīrāvāḍī SGD.; હીરાવાડી	S; 7-0	1.5; 373; 56; 369	Songadh; 7-0
660	Holīpāḍā BNS.; હોલીપાડા	NE; 3-0	0.7; 371; 76; 371	Bansda; 3-0
661	Huḍā DRP.; હુડા	SE; 35-0	3.8; 366; 72; 356	Pendha; 5-0
662	Icchāpor CRP.; ઈચ્છાપોર	SW; 7-6	3.5; 1441; 310; 1285	Local;
663	Icchāpor GND.; ઈચ્છાપોર	N; 4-0	1.3; 870; 176; 759	Local;
664	Isanpor BRD.; ઈસનપોર	N; 5-6	1.0; 275; 45; 269	Varad; 1-0
665	Isanpor OPD.; ઈસનપોર	SE; 2-0	1 3; 470; 98; 444	Karamla; 1-4
666	Isanpur MGL.; ઈસનપુર	W; 18-0	2 7; 835; 132; 704	Wankal; 3-0
667	Isar MDV.; ઈસર	N; 8-0	1.9; 877; 143; 850	Zankhvav; 6-0
668	Isarolī BRD.; ઈસરોલી	S; 2-0	2.6; 670; 134; 614	Bardoli; 2-0
669	Isarolī PLN.; ઈસરોલી	N; 1-4	2.0; 263; 60; 232	Baleshwar; 0-2
670	Iṭālavā PLN.; ઈટાલવા	W; 1-0	1.0; 528; 109; 456	Palsana; 1-0
671	Itālavā NVR.; ઈટાલવા	S; 3-0	1.3; 1034; 187; 854	Local;
672	Inamā VLD.; ઈનમા	N; 1-6	0 9; 408; 99; 390	Valod; 1-4
673	Indu VRA.; ઈન્દુ	N; 1-0	1.5; 261; 60; 261	Vyara; 1-0
674	Jāfarābād OPD.; જાફરાબાદ	W; 2-0	1.0; 89; 21; 89	Saras; 2-0
675	Jāgīrī DRP.; જાગીરી	NE; 29-0	1.0; 366; 72; 366	Pondha; 7-0
676	Jahāṅgīrābād CRS.; જહાંગીરાબાદ	NW; 4-0	1.6; 330; 57; 178	Rander; 1-0
677	Jahāṅgīrapurā CRS.; જહાંગીરપુરા	NW; 4-4	1 1; 245; 52; 185	Rander; 1-1
678	Jākhalā MDV.; જાખલા	E; 2-0	1.5; 244; 51; 237	Tarsada Bargama; 1-0
679	Jākharaḍā BRD.; જાખરડા	S; 7-0	0.4; 144; 28; 139	Surban; 1-0

Railway St.; Distance in miles.	Weekly Bazar; Distance. Bazar Day.	Motor Stand; Distance.	Drinking water facilities	Institutions and other information.
5	6	7	8	9
Zankhvav 16-0	Pipalwada 3-0; Sat.	Mandvi 9-0	w.	
		deserted		
Bulsar; 34-0	Bopi; 2-0; Fri.	Dharampur;16-0	n.,p.	sl(pr).
Sayan; 7-0	Surat; 13-0; Sat.	Olpad; 1-6	w.	
Velachha; 1-4	Velachha; 1-4;	Kim; 4-4	w.	sl(pr).; pyt.; 2cs.; tl; mq.; 2dg.; ch; lib.
Madhi; 14-0	Buhari; 3-0; Wed.	Pipardi; 1-0	w.,rv.	sl(pr).
Local;	Local;		w.,p.	sl(pr).; pyt.; 2cs.; 2mq.; 6dg.; ch.
Bulsar; 40-0	Sildha; 4-0; Sat.	Chival; 10-0	p.	
Bulsar; 34-0	Ukta; 8-0; Sun.	Dharampur;33-0	p.	
Songadh; 20-0	Songadh; 20-0; Sun.	Songadh; 20-0	rv.	sl (lokshala).
Bardoli; 7-0	Surali; 5-0; Thu.	Vankaner; 3-0	w.,rv.	
Songadh; 7-0	Songadh; 7-0; Sun.	Songadh. 7-0	w.	sl (lokshala),; pyt.; ch.
Kevdi Road; 5-0	Bansda; 3-0; Fri.	Bansda; 3-0	w.	
Bulsar; 53-0	Local; Tue.	Penth; 7-0	p.,w.	
Surat; 7-0	Surat; 7-0; Sat.	Local;	w.,p.	sl (pr).; pyt.; 2tl.; 3dh.; ch.; lib.; dp.
Vedchha; 3-4	Gandevi; 5-0; Wed.	Salej, 1-0	w.	sl (pr) tl.; ch.; lib.
Bardoli. 7-0	Surali. 5-0. Thu.	Panada; 2-0	w.	
Sayan; 6-0	Surat; 8-0; Sat.	Masma; 1-0	w.,p.	sl (pr).; cs.; 2tl.
Wankal; 3-0	Wankal; 3-0. Fri.	Mangrol; 6-0	w.	sl (Lokshala).; pyt.; cs.
Zankhvav; 6-0	Devgadh; 0-4; Thu.	Local;	w.	cs.
Bardoli; 2-0		Ahwa; 0-4	w.	sl (pr).; tl.; ch.; lib.
Chalthan; 3-6	Baleshwar; 0-2;	Local;	w.	tl.
Chalthan; 4-0	Palsana; 2-0;	Palsana; 1-0	w.	sl (pr).; pyt.; 2mq.; 2dg.; ch.; lib.
Navsari; 4-0	Navsari. 3-0; Sun.	Local;	w.	sl (pr).
Madhi; 7-4	Valod, 1-4; Fri.	Butwada; 0-1	w.	cs. (mis).
Vyara; 1-0	Vyara; 1-0; Sat.	Vyara; 1-0	w.	tl.
Sayan; 9-0	Surat; 10-0; Sat.	Olpad; 2-0	w.	
Bulsar; 54-0	Huda; 2-0; Tue.	Dharampur; 29-0	rv.	
Surat; 5-0	Surat; 5-0; Sat.	Surat; 5-0	w.	tl.
Surat; 5-4	Surat; 5-4; Sat.	Rander; 1-1	w.rv.	sl (pr).; fr (Adhik Sm 15).; 2tl.
Madhi; 9-0	Mandvi; 2-0; Wed.	Local;	w.rv.	sl (pr).; cs.; tl.
Bardoli; 7-0	Mahuva; 5-0; Mon.	Bhuvasan; 0-1	w.	

Serial No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati; 1	Direction; Travelling distance from taluka or peta H.Q. 2		Area (Sq. miles.); Population; Households; Agricultural Population. 3				Post office; Distance in miles. 4	
680	Jalālapor NVR.; જલાલપોર	W;	2–0	4.6;	8647;	1792;	721	Local;	
681	Jāmagabhāṇ DRP.; જામગભાણ	S;	16–0	1.2;	276;	55;	267	Dharampur;	16-0
682	Jāmakhaḍī SGD.; જામખડી	SE;	9–0	1.9;	389;	64;	372	Songadh;	10-0
683	Jāmkui MDV.; જામકુઈ	N;	10–4	1.4;	121;	19;	121	Zankhvav;	7-0
684	Jamālapor NVR.; જમાલપોર	S;	0–4	0.7;	292;	60;	16	Navsari;	1-4
685	Jāmalī SGD.; જામલી	SE;	23–0	0.9;	293;	47;	291	Navapur;	13-0
686	Jāmaliā DRP.; જામલીઆ	E;	20–0	3.2;	310;	57;	310	Dharampur;	20-0
687	Jāmaliā VRA.; જામલીઆ	SE;	17–0	1.3;	137;	24;	121	Dolvan;	6-0
688	Jāmaṇakuvā SGD.; જામણકુવા	S;	5–0	0.7;	269;	41;	194	Songadh;	5-0
689	Jāmaṇakuvābār MDV.; જામણકુવાબાર	N;	2–0	1.4;	553;	115;	532	Tarsada Bargama;	1-4
690	Jāmaṇakuvā-Devagaḍh MDV.; જામણકુવા-દેવગઢ	N;	10–0	1.6;	24;	3;	24	Zankhvav;	9-0
691	Jāmanapāḍā CKL.; જામનપાડા	SE;	15–0	3 1;	1290;	243;	1287	Dharampur;	7-0
692	Jāmaniā BNS.; જામનીઆ	W,;	2-0	1.4;	359;	77;	355	Bansda	2-0
693	Jāmaṇiā VLD.; જામણીઆ	NS;	5–4	1 0;	614;	101;	346	Buhari;	5-0
694	Jamāpur SGD.; જમાપુર	N;	13–0	1.7;	336;	54;	336	Songadh;	13-0
695	Jāmatalāv SGD.; જામતળાવ	E;	30–0	0 5;	82;	11;	75	Navapur;	24-0
696	Jāṁbavāṇ SGD.; જાંબવાણ	SE;	19–0	0 3;	107;	19;	101	Navapur;	12-0
697	Jātabharathāṇā KMJ.; જાતભરથાણા	W;	7–4	0.6;	302;	36;	176	Orna;	0-6
698	Jatapor PLN.; જતપોર	E;	8–0	0.1;	283;	45;	258	Gangadhra;	2-0
699	Jesapor BLR.; જેસપોર	N;	8–0	1.1;	714;	156;	714	Dungri;	2-0
700	Jesiṅgapur VRA.; જેસીંગપુર	S;	9–0	2 5;	794;	142;	792	Buhari;	3-0
701	Jetapur MDV.; જેતપુર	N;	12–0	1.6;	34;	6;	34	Zankhvav;	12-0
702	Jētavāḍī VRA.; જેતવાડી	S;	3–0	1.0;	107;	19;	106	Vyara;	3-0
703	Jiāv CRS.; જીઆવ	S;	8–0	2.3;	511;	106;	470	Bhestan;	1-0
704	Jiṇod OPD.; જીણોદ	NW;	6–4	1.6;	511;	98;	458	Olpad;	1-4
705	Jīor KMJ.; જીઓર	E;	3–2	0.8;	97;	19;	97	Kamerj;	4-4
706	Jīrawal DRP.; જીરવલ	S;	21–0	3.4;	477;	92;	477	Dharampur;	21-0

Railway St.; Distance, in miles.	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance.	Drinking water facilities	Institutions and other information.
5	6	7	8	9
Navsari; 1–0	Local;	Navsari 1–0	w.	2sl (2pr).; pyt.;cs.;(mp).; fr (Srn, every Monday) Puneshwar.;4tl.; M.; mq. dg.;2dh.; gym.;ch lib.; 6dg.; cch.
Pardi; 23–0	Mandvia; 1–0; Fri.	Nana-; 10–0 Pondha; (Chiwal);	p.,rv.	sl (pr).
Songadh; 10–0	Songadh; 10–0; Sun.	Songadh; 9–0	w.	sl (lokshala).; pyt.; fr.; dp.
Zankhvav; 7–0	Devgadh; 3–4; Thu.	Devgadh; 3–4	w.	
Navsari; 1–4	Navsari; 1–4; Sun.	Navsari; 1–4	w.	
Navapur; 13–0	Navapar; 13–0; Sat.	Navapur; 13–0	w.	pyt.
Bulsar; 38–0	Rajpuri Jungle; 6–0; Thu.	Dharampur 20–0	rv.,p.	sl (lokshala).
Sara; 7–0	Panchol; 6–0; Fri	Dolvan; 6–0	w.	
Songadh; 5–0	Songadh; 5–0; Sun.	Songadh; 5–0	w.	sl (pr).; pyt.
Madhi; 6–4	Mandvi; 1–4; Wed.	Local;	w.	sl (pr).; cs.; tl.; ch.
Zankhvav; 9–0	Devgadh; 4–0; Thu.	Devgadh; 4–0	w.	
Bulsar; 20–0	Dharampur; 7–0; Mon	Khergam; 5–0	w.,rv.	sl(pr).; pyt.
Unai; 9–0	Bansda; 2–0; Fri.	Bansda; 2–0	w.	sl(pr).; tl.
Madhi; 15–0	Buhari; 5–0; Wed.	Buhari; 5–0	w.	sl(pr).; pyt.; lib.
Songadh; 13–0	Songadh; 13–0; Sun.	Songadh; 13–0	w.,rv.	sl (Lokshala).
Navapur; 24–0	Navapur; 24–0; Sat.	Navapur; 24–0	w.	
Navapur; 12–0	Navapur; 12–0; Sat.	Navapur; 12–0	w.	
Bardoli; 4–0	Bardoli; 4–0; Sat.	Orna; 0–4	w.	pyt.
Gangadhra; 2–0	Gangadhra; 2–0;	Bardloi; 3–0	w.	
Dungri; 2–0	Dungri; 2–0;	Dungri; 2–0	w.	sl(pr).
Vyara; 10–0	Buhari; 3–0; Wed.	Local;	w.	sl(pr).; pyt.; cs.; ch.; lib,
Zankhvav; 12–0	Pipalwada; 1–4; Sat.	Sathvav; 7–0	w.	
Vyara; 3–0	Vyara; 3–0; Sat.	Vyara; 3–0	w.,rv.	pyt.
Bhestan; 2–0	Surat; 8–0; Sat.	Bhestan; 1–0	w.,p.	sl (lokshala).; tl; ch.
Sayan; 15–0	Surat; 18–0; Sat.	Local;	w.	sl(pr).; cs.; fr (Ct, Sud 7 & 8) Goddess Yamasuri.; 2tl.; dh.
Sayan; 10–0	Surat; 14–0; Sat.	Dugara; 0–1	w.,rv.	fr(Srn).; tl.; dh.
Pardi; 21–0	Mandra; 3–0; Fri.	Nana-ponda; (Chiwal); 8–0	p.,rv.	sl(pr).

Serial No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati; 1	Direction; Travelling distance. from taluka peta H.Q. 2	Area (Sq. miles.); Population; Households; Agricultural Population. 3	Post office; Distance. in miles 4
707	Jogavel DRP.; જોગવેલ	S; 12–0	4.2; 931; 166; 931	Dharampur; 12-0
708	Jogawāḍ CKL.; જોગવાડ	E; 12–0	1.7; 1037; 220; 968	Local;
709	Jokhā KMJ.; જોખા	S; 6–6	2.6; 905; 143; 717	Asta; 1-0
710	Jol MHW.; જોલ	W; 0–4	2.3; 264; 55; 256	Mahuwa; 2-0
711	Jolavā PLN.; જોલવા	N; 6–4	2.0; 417; 75; 405	Bagumra; 1-0
712	Jothāṇ OPD.; જોથાણ	S; 5–0	1.3; 212; 53; 206	Variyav; 3-0
713	Jujavā BLR.; જુજવા	E; 4–0	3.3; 1189; 201; 1064	Ronvel; 4-0
714	Junāi SGD.; જુનાઈ	N; 11–0	0.1; 58; 8; 44	Songadh; 11-0
715	Junavāṇ SGD.; જુનવાણ	SW; 10–0	1.9; 273; 43; 269	Vyara; 7-0
716	Junavāṇī BRD.; જુનવાણી	NE; 9–0	1.2; 286; 60; 265	Kadod; 2-0
717	Junawāṇ MDV.; જુનવાણ	N; 8–0	0.9; 442; 71; 400	Mandvi; 8-0
718	Kabīlapor NVR.; કબીલપોર	E; 1–4	1.1; 735; 160; 324	Kaliawadi; 0-1
719	Kacawāl PRD.; કચવાલ	NE; 8–4	1.3; 496; 90; 496	Mota Vagchhipa; 2-0
720	Kāchab OPD.; કાછબ	E; 7–0	1.4; 190; 44; 177	Syadla; 2-0
721	Kāchal MHW.; કાછલ	S; 3–4	0.6; 296; 60; 276	Karchelia; 1-4
722	Kachol NVR.; કછોલ	SE; 6–0	1.3; 547; 128; 533	Khedsupa; 1-0
723	Kāchol OPD.; કાછોલ	W; 5–0	1 9; 193; 39; 192	Saras; 1-4
724	Kacholī CRS.; કછોલી	S; 14–0	1.5; 800; 171; 704	Sachin; 4-0
725	Kacholī GND.; કછોલી	N; 3–0	2 1; 3015; 584; 1434	Local;
726	Kacigām BLR.; કચીગામ	E; 13–0	2.0; 659; 131; 579	Ronvel; 4-0
727	Kaḍavīdādarā MGL.; કડવીદાદરા	E; 22–0	0.5; 189; 25; 189	Wankal; 11-0
728	Kaḍhaiyā MHW.; કઢૈયા	S; 8–0	2.0; 555; 105; 549	Mahuva; 8-0
729	Kādiā MHW.; કાદીઆ	SW; 1–0	2.3; 192; 40; 190	Mahuwa; 1-4
730	Kādipor NVR.; કાદીપોર	NW; 3–0	0.2; 373; 71; 331	Kasbapar; 0-1
731	Kaḍod BRD.; કડોદ	NE; 11–0	1.9; 7202; 1651; 2348	Local;
732	Kaḍodarā PLN.; કડોદરા	N; 6–0	1.1; 561; 103; 551	Chalthan; 1-0
733	Kaḍolī NVR.; કડોલી	NW; 5–0	2.1; 832; 173; 715	Maroli; 1-4

Railway St.; Distance in miles.	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance.	Drinking water facilities	Institutions and other information.
5	6	7	8	9
Bulsar; 10–0	Mandava; 2–0; Fri.	Nana-pondha; 3–0	n.,p.	sl(pr).; pyt.
Rankuva; 6–0	Kangwai; 1–0; Fri.	Tankal; 6–0	w.,rv.	sl(pr).; pyt.; mq.
Chalthan; 9–0	Bardoli; 8–0; Sat.		w.	sl(pr).; pyt.; cs.(c.).; ch.; lib.
Bardoli; 9–0	Mahuva; 2–0; Mon.	Mahuwa; 2–0	w.	pyt.
Bagumra; 1–0	Gangadhra; 2–0;	Kadodra; 2–0	w.	sl(pr).; pyt.; 2tl.; dh.; ch.; lib.
Ubhan; 6–0	Surat; 7–0; Sat.		o.,w.	sl(lokshala).; 2tl.; ch.
Bulsar; 6–0	Navera; 5–0; Sun.	Local;	w.,rv.	sl(pr).; 2tl.
Songadh; 11–0	Singpur; 4–0; Mon.	Songadh; 11–0	rv.	
Vyara; 7–0	Vyara; 7–0; Sat.	Vyara; 7–0	w.	sl(pr).; pyt.; cs; (c.).
Madhi; 3–0	Kadod; 2–0; Sun.	Kadod; 2–0	w.	dg.
Zankhvav; 8–0	Devgadh; 1–0; Thu.	Local;	w.	sl(pr).; dg.
Navsari; 2–0	Navsari; 2–0; Sun.	Local;	w.	sl(pr).; 5tl.; dh; dp.
Pardi; 11–0	Pardi; 11–0;	Panchlai; 2–0	w.,rv.	sl(pr).
Sayan; 5–0	Surat; 14–0; Sat.	Bhadol; 4–0	w.	cs.(c.); 2tl.
Bardoli; 12–0	Karchelia; 1–4; Tue.	Karchelia; 0–6	w.,rv.	sl (pr).; pyt.
Navsari; 6–0	Navsari; 6–0; Sun.	Adada; 2–0	w.	sl (pr).
Surat; 9–0	Surat; 9–0; Sat.	Velook; 1–0	w.	tl.
Sachin; 4–0	Surat; 12–0; Sat.	Lajpore; 3–0	w.,rv.	sl (pr).; pyt; 2mq. 5dg.; ch.; lib.
Amalsad; 3–0	Suri Bujarang; 4–0;	Local;	w,rv.,t.	sl (pr).; pyt.;cs.;(c).; fr (An,Vad. 14).; fr (Mg., Vad 14).;3tl,;mq.;2dg., dh ; ch.; lib.; 3dp. Famous temple of Gangeshvar Mahadev.
Bulsar; 4–0	Navera; 2–0; Sun.	Dadivalli; 3–0	w.,rv.	
Zankhvav; 5–0	Zankhvav; 5–0;	Zankhvav; 5–0	w.	
Anaval; 10–0	Valvada; 3–0; Sun.	Vank; 1–0	w.	sl (pr).; pyt.; tl.
Bardoli; 11–0	Mahuva; 1–4, Mon.	Mahuva; 1–0	w.,rv.	pyt.
Navsari, 3–0	Navsari; 2–0; Sun.	Kasbapar; 0–2	w.	pyt.; dh.; lib.
Local;	Local; Sun.	Local;	w.,rv.	4Sl (3pr.,h).; pyt.; 3cs.; (3c.). 8tl.; 2mq.; 7dg., dh.; ch.; lib.; 5dp.
Chalthan; 1–0	Chalthan; 1–0;	Local;	w.	sl (pr).;pyt.;cs.;(mis).; fr (Sm, every Saturday) 3tl.; dg.; lib.
Maroli; 1–4	Maroli; 1–4;	Maroli; 1–4	w.,p.	sl (pr) pyt.; 3tl.; lib.

Serial No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati; 1	Direction; Travelling distance from taluka peta H. Q. 2		Area (Sq. miles.); Population; Households; Agricultural Population. 3				Post office; Distance. in miles. 4	
734	Kadrāmā OPD.; કદ્રામા	S;	6-0	2.9;	688;	134;	662	Olpad;	6-0
735	Kaholī VRA.; કહોલી	W;	3-0	1.5;	405;	71;	405	Vyara;	2-4
736	Kājalī DRP.; કાજલી	S;	13-0	2.0;	572;	94;	572	Sukhala;	6-0
737	Kākaḍakopar DRP.; કાકડકોપર	S;	15-0	1.4;	1008;	159;	1008	Sukhala;	2-0
738	Kākaḍakuvā DRP.; કાકડકુવા	S;	4-0	3.0;	1081:	206;	1072	Dharampur;	4-0
739	Kākaḍakuvā SGD.; કાકડકુવા	S;	4-0	0.9;	266;	47;	266	Songadh;	4-0
740	Kākaḍakuvā-Umaradā SGD. કાકડકુવા-ઉમરદા	SW.;	8-0	0.7;	227;	40;	226	Songadh;	8-0
741	Kākaḍamāṭ BLR.; કાકડમાટ	SE;	15-0	1.3;	609;	120;	609	Ronwel;	6-0
742	Kākaḍāpār MDV.; કાકડાપાર	E;	6-0	2.2;	1000;	144;	832	Mandvi;	6-0
743	Kākaḍavā VRA.; કાકડવા	SE;	17-0	2.5;	1165;	192;	1128	Dolvan;	1-0
744	Kākaḍavel CKL.; કાકડવેલ	E;	15-0	1.5;	694;	109;	687	Saravni;	4-0
745	Kākaḍaverī CKL.; કાકડવેરી	SE;	15-0	1.6;	814;	114;	814	Dharampur;	7-0
746	Kākaḍavā MDV.; કાકડવા	N;	2-0	2.1;	244;	50;	244	Mandvi;	2-0
747	Kālā-ˉṁbā BNS.; કાલા આંબા	W;	10-0	2.6;	256;	60;	178	Unai;	10-0
748	Kālaghāṭ SGD.; કાલઘાટ	S;	12-0	1.2;	244,	40,	244	Songadh;	12-0
749	Kāḷākāchā NVR.; કાળાકાછા	NE;	7-4	2.4;	577,	117;	487	Dabhel;	1-0
750	KalakavāVRA;. કલકવા	SW;	16-0	4.0,	1521,	240;	1385	Buhari;	3-0
751	Kalamakui VLD.; કલમકુઈ	NE;	8-0	3.1;	1093;	207;	1069	Kiher;	1-4
752	Kalamakui VRA.; કલમકુઈ	S;	19-0	1.5;	276;	53;	271	Buhari,	5-0
753	Kalamakuvā MDV.; કલમકુવા	NE,	5-0	1.4;	390;	58;	388	Mandvi;	5-0
754	Kalamaṭhā GND.; કલમઠા	W;	6 6	5 2;	2044;	483;	1944	Amalsad;	3-0
755	Kālamui MDV.; કાલમુઈ	W;	13-0	1.0;	78,	12;	78	Mandvi;	13-0
756	Kalasāḍ BRD.; કલસાડ	NE;	7-6	................deserted				....	...
757	Kalasar PRD.; કલસર	W;	5-0	1.1;	952;	194;	748	Udwada;	2-0
758	Kalathāṇ NVR.; કલથાણ	W;	10-0	1.2;	1010;	211;	780	Local;	
759	Kāḷāvyārā VRA.; કાળાવ્યારા	N;	10-0	2.0;	656;	98;	601	Vyara;	10-0
760	Kalavāc GND.; કલવાચ	W;	3-0	1.3;	361:	81;	229	Gandevi;	3-0
761	Kalavāḍā BLR.; કલવાડા	E;	8-0	3.3;	1825;	355;	1246	Local;	
762	Kalīārī CKL ; કલીઆરી	E;	6-0	2.0;	944;	169;	922	Amadbara;	3-0

Railway St.; Distance in mile.		Weekly Bazar; Distance; Bazar Day.		Motor Stand; Distance.		Drinking water facilities	Institutions and other information.
5		6		7		8	9
Kim	10–0	Surat	18–0 Sat.	Local;		w.	sl (pr).; pyt.;fr (Ct.Vad. 7,8 and 9) Baliakaka.; 5tl.; mq.; dg.
Vyara	2–4	Vyara	2–4; Sat.	Myhur;	0–4	w.	pyt.; cs.
Pardi	17–0	Sukhala	6–0; Fri	Chiwal;	3–0	w,.p.	sl (pr).; cs.; (fmg).
Napi	8–0	Sukhala	2–0; Fri	Nanapondha;	5–0	w.,p.	sl (pr).; pyt.
Bulsar	22–0	Nani Vahiyal	1–0; Thu.	Dharampur;	4–0	w.,p.	sl (pr).; pyt.
Doswada	3–0	Songadh	4–0; Sun.	Songadh;	4–0	w.	sl (lokshala).; pyt.
Songadh	8–0	Songadh	8–0; Sun.	Songadh;	8–0	w.	
Bulsar	12–0	Chichai	2–0: Sat.	Wankal;	8–0	w.	sl (pr).
Madhi	16–0	Mandvi	6–0; Wed.	Kakadpar Colony:	1–0	w.,rv.	sl (pr).; Kakdapar canal Dam.
Unai	3–0	Panchol	1–0; Fri	Dolvan;	1–4	w.	sl (pr) pyt.; cs.
Bilimora	17–0	Fadwel	5–0; Fri.	Fadwel;	5–0	w.,str.	2sl (pr. loksahala).; tl.
(i) Bilimora (ii) Chikhali Road	20–0 15–0	Dharampur	7–0; Mon.	Khergam;	6–0	w.,n.	sl (pr).
Madhi	10–0	Mandvi	2–0; Wed.	Mandavi;	2–0	w.	
Local		Kharjai	3–0; Wed			w.,rv.	2sl.;(pr.;lokshala).;tl.
Songadh	12–0	Bandharpada Mota	4 0; Mon	Songadh.	12–0	w.	sl (pr).; pyt.
Maroli	4 0	(i) Maroli (ii) Navsari	4–0; 6 0; Sun	Dabhel.	1–0	w.	sl (pr).; pyt.; tl.; mq., dg.; ch.; lib.
Anaval	8–0	Buhari	3 0; Wed	Buhari.	3–0	w.	sl (pr.; pyt.; cs.; (c).; ch.; lib.
Kiher	1 4	Loterva	1 0.	Madhi.	4–0	w.,rv	sl(pr).; pyt.
Unai	5–0	Bhenskatri	3 0; Sun	Unai;	8–0	w.,rv.	sl(pr).; pyt.
Zankhavv	10–0	Devgadh	4–0; Thu.	Ranvav.	3–0	w.	sl (lokshala).
Amalsad	3–0	Bilimora	3–0.	Bilimora;	3–0	w.,t.	sl(pr).; pyt.; cs.(c.).
Vankal	10–0	Amba	4–0; Sat.	Zab. deserted.	3–4	w.	
Udwada	2–0	Udwada	2 0; Tue.	Udwada.	2 0	w	sl(pr); pyt.; tl.
Vedacha	3–0	Navsari	8–0. Sun.	Abrama.	2 0	w.,p.	sl(m).; pyt.; 2tl.
Vyara	10–0	Khodtalav	1–0; Wed.	Kanja;		w.,rv.	sl(pr); pyt.
Chikhali Road.	3–0	Gandevi	3 0. Wed.	Chikhali Road;	3–0	w.,t., rv.	sl(pr).; pyt.; dg; ch.
Bulsar	8–0	Bulsar	7–0;	Local;		w.,t.	sl(pr).; pyt.; 2tl.; dg.; ch.; dp.
Bilimora	13–0	Bamanwada	1–0; Mon.	Fadwel;	1–0	w.	sl(pr).; cs.(c.).

Serial No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati; 1	Direction; Travelling distance. from taluka or peta H.Q. 2	Area (Sq. miless); Population; Households; Agricultural Population. 3	Post office; Distance in miles. 4
763	Kāliāwāḍī NVR ; કાલીઆવાડી	E; 1-0	1.4; 1843; 417; 484	Local;
764	Kāḷibel MDV ; કાળીબેલ	N; 6-0	2.2; 256; 38; 256	Mandvi; 6-0
765	Kālijāman MGL.; કાલીજામણ	NE; 24-0	1.0; 133; 19; 126	Umerpada; 5-0
756	Kamālachoḍ VLD.; કમાલછોડ	N; 3-0	4.1; 2635; 436; 1992	Local;
767	Kamalāpor MDV.; કમલાપોર	W; 9-0	2.0; 453; 90; 443	Kadod; 3-0
768	Kamaḷāpur VRA.; કમળાપુર	SE; 12-0	0 5; 204; 40; 204	Buhari; 1-0
769	Kamalāsotī MDV.; કમલાસોટી	E; 12-0	... ... deserted ...	... ...
770	Kāmal-Zarī BNS.; કામલઝરી	S; 16-0	1 5; 213; 46; 213	Bansda; 14-0
771	Kāmarej KMJ.; કામરેજ	Taluka Headquarters	4 5; 1765; 383; 1069	Local;
772	Kamarolī OPD.; કામરોલી	NW; 6-0	1 2; 363, 64, 341	Surat; 12-0
773	Kambāḍā NVR.; કંબાડા	SE; 13-0	0.9; 296; 63; 35	Astagam; 3-0
774	Kamboyā BNS.; કંબોયા	W, 10 0	1 3; 401; 66; 370	Pratapnagar; 2-0
775	Kāmpariā BLR.; કાંપરીઆ	NE. 12-0	2 2, 806; 154, 805	Ronvel; 3-0
776	Kaṇabāḍ NVR.; કણબાડ	SE; 9-2	1.1; 308, 64; 304	Astagam; 1-0
777	Kaṇabhāi CKL.; કણભાઈ	E; 10 0	2 4; 947; 169; 942	Fadwel; 2-0
778	Kaṇabhī OPD.; કણભી	NE, 7 0	1 2, 239, 42; 236	Syadla; 3-0
779	Kanād OPD.; કનાદ	S; 7-0	1 9, 174, 36, 149	Variyav; 3-0
780	Kaṇadhā BNS.; કણધા	S; 10-0	6 2; 845, 177; 845	Bansda; 10-0
781	Kaṇadhā VRA.; કણધા	SE: 15 0	2.5; 347, 58; 347	Dolvan. 5-0
782	Kaṇāi BRD.; કણાઈ	S, 5 0	0 7; 241; 56; 235	Bardoli, 4-0
783	Kaṇajā VRA.; કણજા	N; 12-0	2.0, 565, 112, 382	Mandvi; 5-0
784	Kaṇajī SGD.; કણજી	S; 11-0	3 0; 187, 33; 187	Songadh; 11-0
785	Kaṇajoḍ VLD.; કણજોડ	S, 3-2	0 9, 353, 61, 352	Valod; 3-2
786	Kanālā SGD.; કનાલા	SW, 8-0	1.1; 413; 59; 406	Vyara; 4-0
787	Kanasāḍ CRS.; કનસાડ	S; 11-4	2 7, 1460; 316, 1121	Local;
788	Kaṇāv PLN.; કણાવ	S; 1-0	1 1; 513, 62, 493	Palsana; 1-0
789	Kanawāḍā MGL.; કનવાડા	W; 3-0	0 8; 221, 46; 165	Simodra; 1-6
790	Kāṇḍolapāḍā BNS.; કાંડોલપાડા	W; 8-0	1 8; 647; 110; 616	Pratapnagar; 4-0
791	Kanerā NVR.; કનેરા	SW; 13-1	2.4; 2467; 552; 573	Panar; 0-2

Railway St ; Distance		Weekly Bazar; Distance Bazar Day		Motor Stand; Distance		Drinking water facilities	Institutions and other information
5		6		7		8	9
Navsari;	2-0	Navsari	1-0; Sun.	Local;		w.	sl (pr).; 2tl.; dh.; ch.; dp.
Vankal;	10-0	Amba	4-0; Sat.	Mandvi:	6-0	w.	sl (lokshala).; cs.
Keori;	2-0	Keori	2-0;	Zankhvav;	10-0	w.	
Kiher;	3-0	Local	Sun.	Local;		w.,rv.	sl(pr).; pyt.; cs.(mis).; 4tl.; M.; dg.; dh,; ch ; 2lib.; dp.
Madhi;	13-0	Kadod	1-4, Sun.	Kadod;	3-0	w.,rv.	cs.; ch.
Unai;	6-0	Buhari	1-0: Wed.	Bedchit;	1-0	rv.	pyt.
				deserted			
Unai;	22-0	Anklach	3-0; Sat.	Dharampur,	9-0	w.,str. rv.	
Sayans;	8-0	Surat	10-0. Sat.	Local;		rv.,w.	sl(pr)., pyt.; cs.(c).; 10tl,; 2mq.; 2dg.; dh.;. ch ; lib; dp.
Surat;	12-0	Surat	12 0: Sat.	Madhi,	1-4	w.	sl(pr).; cs.(c).,; tl.
(i) Navsari; (ii) Gandevi.	14-0 6-0	Gandevi	6 0. Wed.	Astagam;	3-0	w.,rv.	
Dholikui;	3-0	Chapaldhara	2-0; Sat.	Local		w.,str.	cs.(mp.).
Bulsar.	11-0	Navera	3 0. Sun.	Dandivali.	3-0	w	sl(pr).; 2tl.
Navsari.	10-0	Navsari	10-0; Sun.	Astagam;	1-0	w.,P.	
Billimora;	14-0	Fadwel	2-0. Fri	Fadwel.	2-0	w.,rv.	2sl(pr.; lokshala),; pyt.; cs.(c.).
Sayans,	6-0	Surat	14 0. Sat.	Bhadols:	2-0	w.	tl.
Ubhan;	6-0	Surat	6-0 Sat.	Dholikui,	1-0	w	tl., lib.
Unai.	20-0	Anklach	5-0. Sat.	Bansda;	10-0	w. rv., str.	sl(pr).
Unai;	7-0	Panchol	2-4. Fri.	Dolvan.	6-0	w.	
Bardoli,	5-0			Wakaner.	1-4	w.	sl (pr).; pyt.
Vyara;	12-0	Khodtalav	5-0. Fri.	Local.		w.,rv.	sl (pr).; tl.; ch.
Songadh;	11-0	Songadh	11-0; Sun.	Songadh;	11-0	w.	
Madhi;	13-0	Kukanbanda	1-4, Thu.	Valod,	3-2	w.,rv.	sl (pr).
Vyara;	4-0	Vyara	4-0. Sat.	Vyara,	4 0	w.	sl (pr).; pyt.
Sachin:	1-4	Surat	10-0; Sat.	Sachin;	1-4	w	2sl (pr. m).; pyt.; tl.; ch.; lib.; 3dp.
Chalthan;	5-0	Palsana	1-0;	Palsana,	1-0	w.,rv.	sl (pr).; pyt.; fr (Ps sud 15).; 2tl.; dg.; ch.;
Simodra;	1-6	Mangrol	2-4;	Mangrol;	2-4	w.	tl.; Hanuman.
Anaval;	4-0	Moti Valzar	3-0; Mon.	Local;		w.,rv.	sl (pr) tl.
Amalsad:	4-0	Amlsad	4-0,	Panar;	0 2	w.,P.	2sl (2pr) pyt; cs(mp).; fr (As Sud 8) Goddess Agni,; tl.; mq., 5dg.

Serial No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati. 1	Direction; Travelling distance from taluka peta H. Q. 2	Area (Sq. miles); Population; Households; Agricultural Population. 3	Post office; Distance in miles. 4
792	Kāṅgavi DRP.; કાંગવી	E; 4-0	3.1; 1182; 159; 1157	Dharampur; 4-0
793	Kāṅgawai CKL: કાંગવઈ	NE; 10-4	2.8; 1328; 254; 1300	Jogwad; 1-0
794	Kānhādevī SGD.; કાન્હાદેવી	S; 9-0	0.7; 36; 17; 36	Songadh; 9-0
795	Kānī MHW.; કાની	W; 2-0	3.1; 1327; 255; 1152	Mahuwa; 2-0
796	Kāñjaṇ VRA.; કાંજણ	SW; 8-0	3.0; 714; 125; 698	Vyara; 8-0
797	Kāñjanaharī BLR.. કાંજણહરી	E; 7-0	2.6; 1205; 246; 889	Ronvel; 5-0
798	Kāñjaṇ-Raṇachod BLR.; કાંજણ-રણછોડ	E; 9-0	2.5, 1548; 273; 1415	Ronvel; 1-0
799	Kāñjar SGD.; કાંજર	SW; 6-0	2.8; 577; 92; 577	Songadh; 6-0
800	Kankaria MHW.: કાંકરીઆ	S; 10-0	1 7; 420: 91; 379	Mahuwa; 10-0
801	Kansālī MGL.: કંસાલી	S; 3-0	1 8; 274; 42; 268	Wankal; 3-0
802	Kansāriā BNS.. કંસારીઆ	SW; 10-0	1.6, 271, 57; 271	Bansda; 10-0
803	Kanṭalī BRD., કંટાલી	N, 7-0	1.1; 687; 131: 517	Kadod; 5-0
804	Kāntasvel BNS.; કાંટસવલ	W; 7-0	2.3; 700; 127; 602	Anaval; 4-0
805	Kanṭavāv MGL.: કંટવાવ	S; 3-0	2.5: 193. 35; 185	Wankal; 4-0
806	Kanṭawā MGL.: કંટવા	W; 5-0	1.4; 780; 155; 408	Simodra; 2-0
807	Kantharāj OPD., કંથરાજ	E; 7-0	1 0: 342: 70; 312	Sandhier; 2-2
808	Kānṭī SGD.: કાંટી	S; 23-0	1.7: 91: 15; 91	Songadh: 23-0
809	Kanyāsi OPD.; કન્યાસી	E; 21-0	1.3, 540, 122; 523	Kim; 3-0
810	Kapadabandh SGD.. કપડબંધ	N: 17-0	4 4; 161; 27; 161	Songadh; 17-0
821	Kapadavan BNS.: કપડવન	E: 5 0	0.4. 132. 32; 132	Bansda; 5-0
812	Kapaḍavān VRA.; કપડવાણ	SE; 8-0	1.0; 200; 29; 200	Vyara; 7-0
813	Kāpādrā CRS.. કાપાદ્રા	E; 3-4	0 9; 195. 49: 107	Nanavarachha; 3-5
814	Kapaleth. CRS., કપલેથા	S: 14-0	1.3, 1040. 240: 901	Local;
815	Kapāraḍā DRP.; કપારડા	S; 18-0	8.8. 727: 155: 721	Dharampur; 18-0
816	Kapāsi OPD., કપાસી	W: 7-0	0.9; 174; 29, 166	Kundiana; 1-0
817	Kapurā VRA.. કપુરા	S; 4-0	3.5: 1794: 303; 1704	Local;
818	Karacakā BRD.: કરચકા	E; 8-0	1.8; 544; 222; 399	Madhi; 3-0
819	Karacond DRP.: કરચોંડ	S; 32-0	6 0; 466: 81: 465	Shelvas; 12-0

Railway St; Distance		Weekly Bazar; Distance; Bazar Day		Motor Stand; Distance		Drinking water facilities	Institutions and other information
5		6		7		8	9
Bulsar	22–0	Dharampur	4–0; Mon.	Dharampur;	4–0	w.,n.,rv.	sl (pr).; pyt.
Rankuva	4–0	Local	Fri.	Kharoli;	3–0	w.,str.	2sl (2pr).; pyt.; mq.; dg.; ch.
Doswada	3–0	Bandharpada Mota	3–0; Mon.	Songadh;	9–0	w.	
Bardoli	9–0	Mahuva	2–0; Mon.	Mahuva;	2–0	w.	sl (pr).; pyt.; 2tl.; dh.; lib.
Vyara	8–0	Vyara	8–0; Sat.	Dhat;	1–0	w.	sl (pr).; pyt.; cs.
Bulsar	7–0	Navera	6–0; Sun.			w.	sl (pr).
Bulsar	9–0	Bulsar	9–0:	Ghoga Pardi;	2–4	w.,rv.	sl (pr).; pyt.
Dosawada	1–0	Songadh	6–0; Sun.	Songadh;	6–0	w.	sl (lokshala).; pyt.; cs.
Dholikuwa	4–0	Local	Fri.	Vanskui;	5–0	w.,rv.	sl (pr).; mq.; dg.; ch.; cs.
Wankal	3–0	Wankal	3–0; Fri.	Mosali;	3–0	w.	cs.
Anaval	8–0	Limzar	1–4; Sun.	Kamboya;	5–0	w.,str.	sl (pr).; tl.
Bardoli	6–0	Kadod	5–0; Sun.	Khoj;	1–0	w.,t.	sl (pr).; dh.
Anaval	4–0	Moti Valzar	2–0; Mon.	Kandolpada;	1–0	w.,t.	sl (pr).; ch.
Wankal	4–0	Wankal	4–0; Fri.	Zankhvav;	4–0	w.	cs; (c).
Asarma	2–0	Valechha	4–0;	Bhatkal;	6–0	w.,p.	sl (pr).; pyt.; cs.; (c); 2tl.
Sayan	4–0	Surat	20–0; Sat.	Sandhier;	3–0	w.	tl.
Songadh	23–0	Songadh	23–0; Sun.	Songadh;	23–0	rv.	
Kim	3–0	Surat	18–0; Sat.	Pipodra,	1–0	w.,p.	sl (pr) cs.; tl.
Songadh	17–0	Umarda	2–4; Tue.	Songadh;	17–0	o.	
Kevdi Road	3–0	Khambla	1–0; Tue.	Bansda;	5–0	w.,rv., str.	
Vyara	7–0	Balpur	0–4; Mon.	Bamnamal;	4–0	w.	pyt.
Surat	3–0	Surat	1–0; Sat.	Surat;	3–0		2tl.; dg.
Sachin	4–0	Surat	2–0; Sat.	Lajpore;	1–0	w.,rv	sl(pr).; pyt.; tl.; mq.; dg.; ch.; lib.; dp.
Bulsar	36–0	Mandva	5–0; Fri.	Nanapondha (Chiwal);	10–0	w.,p.	sl(pr).; tl.; ch.
Surat	12–0	Surat	12–0; Sat.	Kundiana;	1–0	w.p,.	tl.
Vyara	4–0	Vyara	3–0; Sat.	Local;		w.	sl(pr).; pyt.; cs.; tl (Hanuman).; ch.; lib.; dp.
Timberva	2–4	Surali	3–0; Thu.	Madhi;	3–0	w.,rv.	sl(pr).; pyt.; tl.; lib.
Vapi	20–0	Dodhani	5–0; Fri.	Rakholi;	10–0	w.,rv. p.	sl(pr).

Serial No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati.	Direction; Travelling distance. from taluka peta H. Q.	Area (Sq. ms.); Population; Households; Agricultural Popuation.				Post office; Distance in miles	
	1	2	3				4	
820	Karādavā CRS.; કરાડવા	SE; 5-3	0.6;	84;	12;	84	Dindoli;	1-0
821	Karāḍi NVR.; કરાડી	W; 8-0	6.1;	1781;	451;	322	Local;	
822	Karagarā MGL.; કરાગરા	E; 2-0	1.0;	155;	37:	50	Mangrol;	2-0
823	Karajan KMJ. કરજણ	NE; 6-0	4.7;	1102;	217;	1046	Ghala;	2-0
824	Karajun DRP.; કરજુન	SE; 31-0	2.8;	543;	112;	542	Dharampur;	31-0
825	Karālā PLN.; કરાલા	N; 5-4	0.1;	173;	43;	170	Chalthan:	1-0
826	Karamakhāl PRD. કરમખાલ	S; 21-0	1.5:	552;	71:	508	Lawachha:	2-0
827	Karamalā OPD., કરમલા	SE; 3-4	2 1;	536;	113.	480	Local;	
828	Karaṇ PLN.; કરણ	N; 3-0	0 1;	543;	83,	461	Chalthan;	1-0
829	Karañj CRS.; કરંજ	E; 3-2	0.7;	219;	45;	177	Navagam:	0-6
830	Karañj OPD.; કરંજ	W; 7-0	1.8;	708;	141;	375	Olpad;	7-0
831	Karañj MDV.; કરંજ	E; 22-4	1 8;	820;	166;	786	Tadkeshwar;	5-0
832	Karañjakhēḍ VRA.: કરંજખેડ	S; 20-0	3.0,	642.	110;	641	Dolvan;	6-0
833	Karañjakhed MDV.; કરંજવાળ	NE; 10-0	1 7,	119,	24,	119	Mandvi.	10-0
834	Karañjavel VRA.; કરંજવેલ	SE; 7-0	5.0;	793;	153;	793	Vyara;	7-0
835	Karañjaverī DRP. કરંજવેરી	N; 4-0	3 3;	989.	189;	989	Dharampur,	3-4
836	Karānkhat NVR.; કરાંખટ	NW. 9-0	1.8;	564.	114.	413	Mangrol:	1-0
837	Karavalī DRP.; કરવલી	S; 28-0	0.7;	139.	25:	139	Dharampur;	28-0
838	Karavalī MDV.; કરવલી	NW. 6-0	2 0;	583;	106:	582	Mandvi	6-0
839	Karavandā SGD.; કરવંદા	SE; 28-0	1.1;	86;	19;	80	Navapur:	15-0
840	Karavāṭī MDV.; કરવાટી	....	....		deserted		....	
841	Karāyā PRD.; કરાયા	S; 11-0	2.6;	1171;	208;	1140	Koparli,	3-0
842	Kārelī OPD.; કારેલી	E; 13-0	3.1;	548;	104;	456	Syadla;	1-0
843	Kārelī PLN. કારેલી	E; 7-0	2.1;	681;	117;	335	Ghangadhra;	1-0
844	Karod SGD.; કરોડ	SE; 35-0	2.5;	679;	113;	594	Khandbara;	9-0
845	Karoḍa Koṭhavā MVR.; કરોડ કોઠવા	S; 9-0	1.1;	956;	212;	950	Anchel;	1-4
846	Karūṭhā MDV.; કરૂઠા	NE. 6-0	1.6;	157;	23;	157	Mandvi;	6-0

Railway St.; Distance in miles	Weekly Bazar; Distance; Bazar Day	Motor Stand; Distance	Drinking water facilities	Institutions and other information
5	6	7	8	9
Udhva; 3–0	Surat; 5–4; Sat.	Local;	w.	tl.
Navsari; 8–0	Navsari; 8–0; Sun.	Matvad; 1–0	w.	sl(m).; tl. lib.; 5dp.
Mangrol; 2–0	Mangrol; 2–0;	Mangrol, 2–0	w.	pyt.
Sayan; 8–0	Surat; 16 0, Sat.	Dungara; 1–4	w.	sl(pr).; pyt.; cs.(mis.).; 4tl.; mq.; dg.; dh.; ch.; lib.; dp.
Bulsar; 49–0	Lavkar; 3 0; Sun.	Chiwals, 22–0	rv.,w., p.	sl(pr).
Chalthan, 1–0	Chalthan; 1–0;	Chalthan, 1–0	w.,t.	tl.
Vapi; 9–0	Chhibhad-kachha; 2-0; Sun.	Lawachha; 1–3	w.	sl(pr).
Sayan; 6–0	Surat, 10–0, Sat.	Atodara; 1–0,	w.	sl(pr).; pyt.; cs.; 2tl.; dh; lib.
Chalthan; 1–0	Chalthan; 1–0;	Local;	w.	sl(pr).; pyt.; 2tl.; dg.; ch.; lib.
Surat; 1–0	Surat; 1–0; Sat.	Navagam; 0–6	w.	
Sayan; 16–0	Surat; 20–0; Sat.	Local;	w. w.,p.	sl(pr).; pyt.; cs.; tl.; mq.; dg.; dh.; ch.; lib; dp.
Kim. 5–0	Amba, 14-0, Sat.	Local.	w.	sl(pr).; cs.; mq.; dg; ch.
Sara; 6–0	Panchol; 4-0; Fri	Dolvan, 6–0	w.	sl (lokshala); pyt.
Zankhvav; 10-0	Devgadh 2-0, Thu.	Fulwadi; 2–0	w.	sl (lokshala); pyt.
Vyara. 7–0	Balpur. 0-6. Mon.	Bamnamal, 4–0	w.,rv.,	sl(pr). ch.
Bulsar, 21–4	Amba Talat; 4-0;	Dharampur; 4–0	n.	
Maroli; 5–0	Maroli 5-0;;	Parujan, 0–4	w. rv.,p.	sl(pr).; pyt; tl; ch.; lib.
Bulsar; 53–0	Rakholi, 8–0, Fri	Rakholi, 10–0	w.rv,n.	sl(pr).
Kim; 23–0	Amba, 2-0, Sat.	Godsamba; 2–0		sl (lokshala); dg.
Navapur; 15-0	Singana, 9 0, Tue.	Virathva, 2-0	w.,rv.	
Vapi; 8–0	Chhiphadka-chha; 3 0, Sun.	Vapi; 8–0	w.	sl (pr).; pyt.
Sayan; 4-0	Surat; 12-0; Sat.	Sayan; 4–0	w.p.	sl (pr).; pyt.; 3tl.; ch.
Gangadhra; 1–0	Gangadhra; 1-0.	Bardoli; 4–0	w.	sl(pr).; pyt.; cs.; (c); tl.; lib.; 3dp.
Khatgaon; 6–0	Khandbara; 9-0; Sun.	Chinchpada, 9–0	w.	sl (pr).; pyt.; tl.
Vedchha; 2–0	Navsari; 8-0; Sun.	Abrama; 2-4	w.	sl (pr).; 2dg.
Zankhvav; 21–0	Devgadh; 3–0; Thu.	Devgadh; 3–0	w.	sl (pr).

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847	Kasād OPD.; કસાદ	N; 5-4	1.3; 509; 38; 509	Olpad; 5-0
848	Kasāl MDV.; કસાલ	SW; 6-0	1.3; 531; 98; 525	Mandvi; 6-0
849	Kāsalā (Bujarag) OPD.; કાસલા (બુજરગ)	SW; 3-0	0.7; 190; 33; 188	Saras; 2-0
850	Kāsalā (Khurad) OPD.; કાસલા (ખુરદ)	SW; 4-0	0.6; 180; 34; 166	Saras; 1-0
851	Kāsaṁbīā VLD.; કાસંબીઆ	S; 1-5	0.9; 310; 56; 288	Valod; 2-0
852	Kāsaṭaveri DRP;. કાસટવેરી	SE; 37-0	1.8; 115; 19; 115	Pendha; 15-0
853	Kasavāv VRA.; કસવાવ	SW; 9-0	3.0; 1250; 232; 1217	Buhari; 3-0
854	Kasbāpār NVR.; કસબાપાર	E; 4-0	0.9; 1405; 278; 792	Local;
855	Kāsṭoniā DRP.; કાસ્ટોનીયા	S; 22-0	0.3; 131; 30; 131	Dharampur; 22-0
856	Kāṭaghaḍ VRA. કાટઘડ	NW; 2-4	0.8; 154; 28; 154	Vyara; 2-4
857	Kāṭakui VRA.; કાટકુઈ	SE; 8-0	2.0; 286; 50; 283	Vyara; 8-0
858	Kāṭakuvā MDV.; કાટકુવા	NE; 7-0	1.8; 219; 29; 219	Mandvi; 7-0
859	Katārgām CRS.; કતારગામ	N; 2-0	4.1; 7000; 1568; 2016	Local;
860	Kaṭāsavāṇ VRA. ; કટાસવાણ	NW; 2-4	3.8; 1064; 181; 1043	Vyara; 2-4
861	Kaṭhawāḍā MGL. કઠવાડા	NW; 11-0	1.7; 430; 89; 55	Kosamba; 3-0
862	Kaṭhodarā KMJ.; કઠોદરા	NW; 4-0	2.1; 919; 195; 848	Local;
863	Kaṭhodarā OPD.; કઠોદરા	E; 15-0	2.2; 1919; 391; 753	Kim; 1-0
864	Kaṭhor KMJ.; કઠોર	W; 4-0	4.3; 5624; 1204; 1651	Local;
865	Kaṭīsakuvā SGD.; કટીસકુવા	E; 22-0	0.2; 95; 14; 95	Navapur; 15-0
866	Kaṭīsakuvā (najīk) VRA.; કટીસકુવા (નજીક)	N; 4-0	2.5; 439; 73; 432	Vyara; 4-4
867	Kaṭīsakuva (dūr) VRA.; કટીસકુવા (દૂર)	N; 5-0	1.5; 340; 58; 338	Vyara; 5-0
868	Kāvaḍej BNS.; કાવડેજ	SW; 6-0	2.0; 401; 83; 401	Bansda; 6-0
869	Kāvalā SGD.; કાવલા	NW; 6-0	2.5; 128; 24; 127	Songadh; 6-0

Railway St.; Distance	Weekly Bazar; Distance; Bazar Day	Motor Stand; Distance	Drinking water facilities	Institutions and other information
5	6	7	8	9
Surat; 18-0	Surat; 18-0; Sat.	Takarma; 4-0	w.	tl.; dg.; ch.
Madhi; 15-0	Amba; 2-0; Sat.	Local;	w.	sl (pokshala),.
Surat; 11-0	Surat; 11-0; Sat.	Olpad; 3-0	w.	ch.
Surat; 11-0	Surat; 11-0; Sat.	Velook; 0-4	w.	sl (Lokshala).
Madhi; 12-0	Valod; 2-0; Fri.	Valod; 1-2	w.	sl (pr).
Bulsar; 52-0	Huda; 6-0; Tue	Penth; 12-0	P.	
Vyara; 9-0	Buhari; 3-0; Wed.	Jesingpur; 1-0	w.	sl (pr).
Navsari; 5-0	Navsari; 4-0; Sun.	Local	w.	sl (pr).; pyt.; 3tl.; dh.; lib.; 3dp.
Bulsar; 40-0	Sildha; 7-0; Sat.	Dharampur; 22-0	p.	
Vyara; 2-4	Vyara; 2-4; Sat.	Vyara; 2-4	w.rv.	
Vyara; 8-0	Balpur; 0-4; Mon.	Bamnamal; 4-0	w.	pyt.
Zankhvav; 11-0	Devgadh; 1-0; Thu.	Devgadh; 1-0	w.	
Surat; 2-0	Surat; 2-0; Sat.	Local;	w.	3sl (3pr).; pyt.; cs. (mp) fr (Srn. all Mondays, Kt. Sud 15).; 3tl.; mq. 4dg..; dh.; lib.; 7dp;
Vyara; 2-4	Vyara; 2-4; Sat.	Vyara; 2-4	w	sl (pyt).; cs.; lib.;
Velachha; 1-0	Velachha; 1-0;	Kosamba; 3-0	w.p.	sl (Lokshala) pyt; ch.
Surat; 5-0	Surat; 5-0; Sat.	Local:	w.	sl (plr).; pyt.; 2t.; dh.; ch.; lib.
Kim,; 1-0	Surat; 15-0; Sat.	Kim; 1-0	w.	3sl (2pr; m); cs.; 3tl, 2mq.; 3dg.; 2dh.; ch; 3dp.
Sayan;, 4-0	Surat; 10-0; Sat.	Local;	pl.	6sl (4pr.; m.; h) pyt; 2cs; (mp.; mis;) ur (in Moharram days). 8tl; 11mq.; 10dg.; 3dh.; 3gym.; ch.; 3lib 7dp.
Navapur; 15-0	Navapur; 15-0 Sat.	Navapur; 15-0	rv.	
Vyara; 4-4	Vyara; 4-4; Sat.	Vyara; 4-0	w.	sl (lokshala).; pyt.
Vyara; 5-0	Vadkui; 4-0; Tue.	Bolda;; 4-0	w.	sl (lokshala).; pyt.
Unai; 13-0	Limzad; 2-0; Sun.	Bansda; 6-0	w.rv; str.	sl (pr).
Songadh; 6-0	Songadh; 6-0 Sun.	Songadh; 6-0	rv.w.	

Sr. No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati. 1	Direction; Travelling distance from taluka peta H. Q. 2	Area (sq. miles); Population Households; Agricultural Population. 3	Post office; Distance. in miles. 4
870	Kavās CRS.; કવાસ	SW; 9-0	3.2; 625; 130; 614	Bhatha; 1-4
871	Kavithā MHW; કવિઠા	E; 5-0	1.0; 529; 86; 504	Amkach; 1-0
872	Kavāl PRD.; કવાલ	S; 12-0	1.1; 395; 65; 371	Koparli; 2-0
873	Keḷadhā DRP.; કેળધા	SE; 38-0	1.3; 95; 14; 95	Pendha; 16-0
874	Kelai SGD.; કેલઈ	NW; 5-0	1.7; 417; 78; 413	Songadh; 5-0
875	Kelakāch BNS.; કેલકાછ	NE; 7-0	2.2; 393; 64; 299	Unai; 2-0
876	Keḷakui VRA.; કેળકુઈ	SW; 9-1	4.3; 1627; 279; 1505	Guhari; 3-0
877	Kelapāḍā DRP.; કેલપાડા	E; 21-4	0.9; 8; 1; 8	Dharampur; 21-4
878	Kelavaṇ VRA.; કેલવણ	E; 20-0	1.5; 47; 11; 40	Songadh; 12-0
879	Kelavaṇī DRP.; કેલવણી	E; 6-0	3.0; 613; 118; 613	Dharampur; 6-0
880	Keliā BNS.; કેલીઆ	SW; 8-0	1.4; 616; 139; 614	Bansda; 8-0
881	Kelī-Bokalī SGD.; કેલી-બોકલી	NE; 28-0	0.04; 72; 14; 72	Navapur; 20-0
882	Kesalī GND.; કેસલી	SE; 3-0	1.5; 1036; 196; 886	Gandevi; 3-0
883	Ketakī DRP.; કેતકી	S; 22-0	0.3; 147; 31; 147	Dharampur; 22-0
884	Kevāḍā BLR.; કેવાડા	E; 4-6	0.6; 453; 85; 382	Bulsar; 4-0
885	Kevaḍī BNS.; કેવડી	NE; 6-0	5.6; 423; 76; 372	Bansda; 6-0
886	Kevaḍi MDV.; કેવડી	NE; 9-0	1.5; 161; 32; 150	Mandvi; 9-0
887	Kevaḍi MGD.; કેવડી	SW; 8-0	1.7; 292; 46; 254	Wankal; 7-0
888	Kevāḍiā MDV.; [illegible]	W; 10-0	0.6; 403; 72; 403	Bodhan; 4-0
889	Kevaṛī MGL.; કેવડી	E; 25-0	0.5; 400; 79; 170	Umerpada; 1-0
890	Khaḍakawāl DRP.; [illegible]	SE; 24-0	5.0; 641; 121; 641	Dharampur; 24-0
891	Khaḍakī DRP.; ખડકી	E; 24-0	0.8; 155; 29; 155	Pendha; 10-0
892	Khaḍakī PRD.; ખડકી	SE; 2-6	1.7; 1127; 229; 807	Rentlaw; 0-4
893	Khaḍakīā BNS.; ખડકીઆ	SE; 2-0	1.8; 277; 52; 263	Bansda; 2-0
894	Khaḍakhad KMJ.; ખડખદ	W; 4-4	1.1; 89; 16; 85	Kathodra; 2-0
895	Khaḍasupā NVR.; ખડસુપા	SE; 10-0	4.0; 1770; 371; 1568	Local;
896	Khaḍī SGD.; ખડી	S; 21-0	2.5; 80; 16; 80	Songadh; 21-0
897	Khajod CRS.; ખજોદ	SW; 6-0	0.3; 564; 119; 513	Local;
898	Khajuraḍī BLR.; ખજુરડી	NE; 7-0	1.7; 832; 171; 718	Ghadej; 3-0
899	Khakhawāḍā GND.; ખખવાડા	N; 3-0	0.8; 816; 151; 791	Local;
900	Khālēr MDV.; ખાલેર	W; 10-0	... ... deserted	... ...
901	Khalī BRD.; ખલી	E; 1-0	0.3; 26; 7; 22	Bardoli; 1-0
902	Khalīpor OPD.; ખલીપોર	E; 7-0	0.7; 195; 32; 164	Sayan; 2-2
903	Khāmadahāḍ DRP.; ખામદહાડ	NE; 15-0	0.9; 99; 21; 99	Dharampur; 15-0
904	Khāṁbālā SGD.; ખાંબાલા	NE; 6-0	1.0; 150; 23; 149	Songadh; 6-0
905	Khāṁbhā baṅgali MGL.; ખાંભા બંગલી	E; 22-0	0.8; 86; 10; 74	Umerpada; 4-0
906	Khāṁbhaḍā CKL.; ખાંભડા	E; 4-0	10.0; 797; 147; 796	Amadhara; 2-0

Railway St.; Distance.	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance	Drinking water facilities	Institutions and other information.
5	6	7	8	9
Surat; 9-0	Surat; 9 0 Sat.	Bhatha; 1 4	w;p.	sl. (pr).; cs. (fmg).; tl.; ch.
Navsari; 13-0	Dholdkui; 3-0 Sun.	Nibali; 1-0	w.,rv.	pyt.; tl.
Vapi; 8-0	Chhibhadkach; 4-0 Sun.	Vapi; 8-0	w.	
Bulsar; 51-0	Huda; 7-0 Tue.	Penth; 12-0	p.	
Songadh; 5-0	Songadh, 5-0 Sun.	Songadh; 5-0	w.	sl (lokshala).
KevdiRoad;2-0	Unai; 2-0 Tue.	Unai; 2-0	w.,rv.	
Vyara; 9-0	Buhari; 3-0 Wed.	Gholan; 2-0	w.	sl(pr).; pyt.; cs.(c.).
Bulsar; 39-4	Rajpuri Jungle7-4 Thu.	Dharampur 21-4	p.	
Songadh; 12-0	Bhenskatri; 4 0 Sun.	Vyara; 20-0	rv.,str.	pyt.
Bulsar; 24-0	Ukta; 0-4 Sun.	Dharampur;6-0	rv.,w.	sl(pr).; cs.(c.).
Unai; 15-0	Limzar; 3-0 Sun.	Bansda; 8-0	w.,rv., str.	sl(pr).
Navapur; 20-0	Navapur; 20 0 Sat.	Navapur, 20 0	n,	
Bilimora; 4-0	Gandevi; 3-0 Wed.	Nadarkha; 1 0	w.	sl(pr).; pyt.; cs.(mp).; lib.
Bulsar 40-0	Sildha; Sat.	Dharampur22-0	p.	
Bulsar; 4-0	Bulsar, 4 0	Gorwada; 0-5	w	sl(pr).
Kevdi Road;1-0	Bansda, 6-0 Fri.	Bansda; 6-0	w.,rv.	
Zankhvav; 20-0	Devgadh; 4-0 Thu.	Sathvav; 4-0	w.	
Wankal; 7-0	(i) Zankhvav;3 0 Fri (ii) Wankal; 7 0	Zankhvav; 3-0	w	cs.
Kim; 19-0	Bodhan; 4 0 Mon	Areth, 1-4	w.	sl(pr)., cs(c).
Local,	Local,		w.	
Bulsar;	Mandav Hutawado, 4 0 Fri.	Nanapondha (Chiwal) 14 0	p.,rv.	sl(pr).
Bulsar, 43 0	Pendha; 10 0	Dharampur24 0	p.,rv.	tl.
Udwada, 1-4	Motiwada, 0-2 Tue.	Local	w.,t	sl(pr). pyt
Unai, 9 0	Bansda, 2 0 Fri	Bansda; 2-0	w.,rv.	sl (pr).
Surat 5 0	Surat 5 0 Sat	Kathodara 3-0	w.	pyt.
Navsari, 10-0	Navsari 9 0 Sun.	Un; 1-4	w.	2sl(2pr).; pyt.; ch.; lib.
Songadh; 21-0	Songadh, 21 0 Sun.	Songadh, 21-0	rv.	
Surat; 6-0	Surat; 6 0 Sat.	Kharvasa, 1-4	w.	sl(pr).; 3tl.; lib.
Dungari, 3-0	Bulsar; 6 0	Owada; 3-0	w.,t.	sl(pr).; lib.
Amalsad, 4 0	Gandevi, 3 0 Wed	Local	w. rv.	sl(pr).; pyt.; tl.; lib.
......	......	deserted	......	......
Bardoli 3-0		Bardoli; 1-0	w.	fr(Ct Sud 15).; tl.
Sayan; 2-2	Surat; 20 0 Sat.	Paria, 1-4	w.	tl.
Bulsar, 30-0	Bopi, 2 0 Fri	Dharampur15-0	rv.	
Doswad; 1 4	Songadh, 6 0 Sun.	Songadh; 6 0	w.,rv.	pyt.; cs.
Keori, 2-0	Keori; 2 0	Zankhvav; 10-0	w.	
Degam, 3-0	Fadwel; 5-0 Fri.	Local;	w.	sl(pr).; pyt.;cs.(c.).; tl.; ch.

Sr. No.	Village or Town name in English; Taluka abbreviation; Village or Town name in Gujarati; 1	Direction; Travelling distance. from taluka peta H. Q. 2	Area (sq. miles.); Population Households; Agricultural Population. 3	Post office; Distance in miles 4
906	Khāmbhalā BNS.; ખાંભલા	E; 6–0	4.1; 843; 178; 843	Bansda; 5-0
907	Khāṁbhalā VLD.; ખાંભલા	NW; 3–2	1.2; 110; 27; 110	Valod; 4-0
908	Khaṁbhalāv NVR.; ખંભલાવ	SW; 8–0	0.5; 315; 82; 140	Att; 1-0
909	Khaṁbhāliā BNS.; ખંભાલીઆ	N; 8–0	1.5; 887; 188; 414	Unai; 2-0
910	Khaṁbhāsalā CRS.; ખંભાસલા	E; 7–0	0.6; 230; 48; 228	Kharvasa; 0-4
911	Khānapur BNS.; ખાનપુર	SW; 16–0	2.4; 793; 157; 791	Bansda; 16-0
912	Khānapur KMJ.; ખાનપુર	NE; 11–0	2.1; 502; 106; 462	Savani; 1-0
913	Khānapur VAR.; ખાનપુર	S; 6–0	0.8; 610; 120; 551	Kapura; 2-0
914	Khāṇḍā DRP.; ખાંડા	NE; 11–0	4.2; 619; 132; 618	Dharampur; 11-0
915	Khaṇḍāḷ MHW.; ખંડાળ	S; 2–0	0.6; 16; 3; 16	Mahuwa; 3-0
916	Khañjarolī MDV.; ખંજરોલી	W; 10–0	1.8; 287; 66; 287;	Kadod; 4-0
917	Khāparawāḍā GND.; ખાપરવાડા	SW; 7–0	2.5; 2081; 417; 1934	Local;
918	Khāpariā GND.; ખાપરિયા	E; 6–1	1.4; 1006; 190; 739	Local;
929	Khapāṭiā DRP.; ખપાટીઆ	E; 33–0	1.0; 60; 12; 60	Dharampur; 37-0
919	Khapāṭiā SGD.; ખપાટીઆ	SE; 23–0	1.7; 122; 19; 122	Navapur; 16-0
210	Kharabhāsī PLN.; ખરભાસી	NW; 5–0	1.0; 243; 60; 225	Chalthan; 1-4
922	Kharaḍ BRD.; ખરડ	S; 12–0	0.6; 123; 22; 104	Supa; 3-4
923	Kharajaī BNS.; ખરજાઈ	E; 8–0	1.2; 245; 46; 242	Sarakevdi; 1-0
924	Kharasāḍ NVR.; ખરસાડ	SW. 9–0	2.5; 1834; 418; 1515	Local;
925	[illegible] SGD.; ખરસી	S; 6–0	1.6; 406; 71; 406	Songadh; 6-0
926	Kharavāṇ MHW.; ખરવાણ	SW; 5–0	3.0; 1451; 261; 1398	Jorvavla; 2-0
927	Kharavāsā BRD.; ખરવાસા	N; 4–0	1.0; 722; 140; 673	Mota; 2-0
928	Kharavāsā CRS.; ખરવાસા	S; 8–0	2.1; 713; 138; 569	Local;
929	Khāravel DRP.; ખારવેલ	E; 2–0	1.7; 821, 130; 734	Dharampur; 2-0
930	Khareḍā MGL.; ખરેડા	6–0	1.1; 288; 52; 215	Wankel; 3-0
931	Khareḍā MDV.; ખરેડા	NE; 6–0	1.5; 371; 61; 362	Mandvi; 7-0
932	Khareḍī DRP.; ખરેડી	N; 8–0	1.2; 332; 56; 332	Dharampur; 8-0
933	Kharodarā CRS. ખરોદરા	S; 1–0	0.5; 1407; 305; 208	Surat; 1-4
934	Kharolī CKL., ખરોલી	E; 13–0	3.0; 1810; 289; 1754	Rankuva; 5-0

Railway St.; Distance. in miles	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance. in miles	Drinking water facilities	Institutions and other information.
5	6	7	8	9
Vaghai; 4-0	Local; Tue.	Bansda; 6-0	w.,rv.	sl(pr); tl.; ch.
Madhi; 5-0	Valod; 4-0 Fri.	Valod; 3-2	w.	sl(pr).
Navsari; 8-0	Navsari; 9-0 Sun.	Att; 1-0	w.	dg.
Unai; 2-0	Unai; 2-0 Tue.	Local;	w.,rv.	sl(pr).; pyt.; tl.; 2dh.; ch; dp.
Niol; 3-0	Surat; 9-0 Sat.	Kharvasa; 1-4	w.	sl (Lokshala).; tl.
Unai; 24-0	Anklach; 2-0 Sat.	Dharampur;7-0	w.,rv.,	sl(pr).; ch.
Bardoli; 7-0	Bardoli; 7-0 Sat.	Mirapur; 1-0	w.	sl(pr); pyt; 3tl.; lib.; dp.
Vyara; 6-0	Vyara; 6-0 Sat.	Local;	w.	sl(pr).; pyt.; cs.
Bulsar; 26-0	Bopi; 6-0 Fri.	Dharampur 11-0	w.,rv.	sl (Lokshala).
Bardoli; 11-0	Karchelia; 3-0 Tue.	Karchelia; 1-4	w.,rv.	
Madhi; 14-0	Kadod; 4-0 Sun.	Areth; 4-0	w.,rv.	tl.
Amalsad; 3-0	Bilimora; 3-0	Bilimora; 3-0	w.,t.	3sl(3pr).; pyt.; 2tl.; m.
(*i*) Chikhali Road 3-0 (*ii*) Gandevi 1-4	Gandevi; 1-4 Wed.	Kharel; 1-0	w.	ls(pr).; pyt.; tl.; lib.
Bulsar; 55-0	Ukta; 15-0 Sun	Dharampur 34-0	p.	
Navapur; 16-0	Singana; 1-0 Tue.	Virathva; 2-0	w.	
Gangadhra; 1-0	Gangdhra; 1-0	Chalthan; 1-4	w.	pyt.; 3tl.
Navsari; 10-4	Navsari; 10-4 Sun.		w.	
Kevdi Road 1-0	Local; Wed.	Bansda; 7-4	w.,rv.	tl.; dg.
Vedchha; 4-0	Navsari; 8-0 Sun.	Local;	w.	sl(pr).; pyt.; cs.(mp).; (*i*) fr(As Sud 8) Goddess Ratan, (*ii*) fr (As Vad 14) Goddess Sindhav.; 2tl.; dh.; ch.; lib.
Doswada; 2-0	Bandharpada Mota. 2-0 Mon.	Songadh. 6-0	w.	sl(pr).; pyt.; cs. (Unlimited).
Anaval; 15-0	Local; Sat.	(*i*) Karchelia 2-4 (*ii*) Fulwadi 2-6	w.	sl(pr).; pyt.; cs.(mp).; ch.; lib.
Bardoli; 3-0		Bardoli; 3-0	w.	sl(pr) ; pyt.; tl.; lib..
Bhestan; 2-0	Surat; 9-0 Sat.	Local.	w.	sl(pr).; cs.; tl.; dh; ch; dp.
Bulsar; 15-0	Dharampur; 2-0 Mon.	Vankal; 1-0	w.	sl(pr).
Wankel; 3-0	Wankal; 3-0 Fri.	Mangrol; 6-0	w.	pyt.
Zankhvav; 7-0	Devgadh; 2-4 Thu.	Fulwadi; 2-0	w.	sl(Lokshala),; cs.
Pardi; 21-0	Nani Vahiyal 3-2 Thu.	Dharampur;8-0	w.,P.	sl(Lokshala); tl.
Surat; 2-4	Surat; 1-4 Sat.	Sangrampura;	w.,pl.	sl(pr).; pyt.; tl.; dg.
Dholikuwa; 1-0	Chapaldhara; 2-0 Sat.	Local;	w.	2sl(2pr).; pyt.; cs. (mp).; tl.

Sr. No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati. 1	Direction Travelling distance. from Taluka peta H. Q. 2	Area (Sq. miles); Population; Households; Agricutural Population. 3	Post office; Distance. in miles. 1
935	Kharolī MDV.; ખરોલી	W; 8-0	3.2; 660; 114; 648	Mandvi; 8-0
936	Khāṭā Āmbā BNS.; ખાટાઆંબા	S; 9-0	9.3; 1539; 319; 1534	Bansda; 9-0
937	Khaṭāṇā DRP.; ખટાણા	N; 6-0	2.3; 915; 159; 895	Dharampur; 6-0
938	Khātradevī MDV.; ખાત્રદેવી	N; 16-0	0.6; 48; 6; 43	Zankhvav; 8-0
939	Khātunīā DRP.; ખાતુનીઆ	S; 22-0	0.3. 83; 16; 83	Dharampur; 22-0
940	Kheḍapor MDV.; ખેડપોર	N; 1-0	0.8; 61; 9; 61	Mandvi; 1-0
941	Kheragām CKL.; ખેરગામ	S; 9-5	6.7; 5544, 1072; 4321;	Local;
942	Kheragam GND.; ખેરગામ	E; 1-6	0 8; 683; 145; 143	Gandevi, 2-0
943	Kheragām NVR.; ખેરગામ	E; 8-1	1.0; 545; 105, 468	Ambada, 1-0
944	Kheralāv PRD.; ખેરલાવ	SE; 8-0	1.2; 640; 91, 603	Rohina; 2-0
945	Kheravā OPD.; ખેરવા	.... deserted		
936	Kheravāḍā SGD; ખેરવાડા	N; 19-0	1 5; 512; 85; 502	Songadh; 19-0
947	Khimapor MDV.; ખીમપોર	E. 14 0	0 7; ...... deserted	
948	Khobā DRP.; ખોબા	E. 33 0	1.4; 18; 6; 18	Dharampur, 33-0
949	Khoḍāimbā MGL.; ખોડાઆંબા	E; 36-0	0 6, 119. 19; 118	Umerpada, 7-0
950	Khoḍāmbā MDV.; ખોડઆંબા	NW. 10-0	3 3, 553; 91; 551	Mandvi; 10-0
951	Khoḍatalav VRA.; ખોડતલાવ	E; 7 0	2 0, 658. 115, 622	Vyara; 7-0
952	Khogaḷagām SGD.; ખોગળગામ	S; 16 0	1 1. 286, 49; 286;	Songadh; 16-0
953	Khoj BRD.; ખોજ	N; 6 2	0 8; 916. 169; 746	Pardi Kadod, [illegible]
954	Khokhasa SGD.; ખોખસા	S. 6-0	1 3, 44; 6, 44	Songadh. 6-0
955	Kholavaḍ KMJ.; ખોલવડ	W, 2 4	2 9, 2616. 575; 1484	Local.
956	Kholeśvar KMJ.; ખોલેશ્વર	NE; 2 0	1 7, 505, 113; 478	Kamrej; 1-4
957	Khudavel CKL.; ખુડવેલ	SE, 6 0	1.7, 649, 121, 625	Amadhara, [illegible]
958	Khundh CKL.; ખુંધ	NE; 1-0	3 2; 1339; 238, 1190	Chikhali. 0-2
959	Khunṭej PRD; ખુંટેજ	S; 5-0	1.4; 748, 123; 748	Paria. 1-0
960	Khuradī VRA.; ખુરદી	SE; 9-0	1 5; 614; 94; 613	Vyara; 9-0
961	Khusālapurā VRA.; ખુસાલપુરા	NW; 2-0	4 5; 980; 164; 969	Vyara; 2-0
962	Khuṭāḍīā VRA.; ખુટાડીઆ	S. 1-4	2.5; 836; 90; 830	Vyara; 1-4
963	Khuṭalī DRD.; ખુટલી	S; 11-0	2 2; 599; 117; 599	Dharampur. 11-0

Railway St.; Distance. in miles.	Weekly Bazar; Distance. Bazar Day.	Motor Stand; Distance. in miles.	Drinking water facilities	Institutions and other information.
5	6	7	8	9
Madhi; 13-0	Amba; 1-0 Sat.	Zab; 1-4	w.,rv.	sl (lokshala).
Unai; 14-0	Chorawani; 3-0 Thu.	Bansda; 9-0	w.,st.	sl(pr).; ch.
Bulsar; 23-0	Vadpada; 3-0 Tue.	Dharampur; 6-0	w.,rv.	sl(pr).; dg.
Zankhvav; 8-0	Devgadh; 7-0 Thu.	Balethi; 6-0	w.	
Bulsar; 40-0	Sildha; 5-0 Sat.	Dharampur; 22-0	p.	
Madhi; 10-0	Mandvi; 1-0 Wed	Mandvi; 1-0	w.	sl(pr).
Bulsar; 12-0	Local;	Local;	w.	sl(pr).; pyt.; 4cs. (2c., 2mis).; 3tl.; 2mq.; dg.; dh.; ch.; lib; 2dp.; cch.
Gandevi; 2-0	Gandevi; 2-0 Wed.	Gandevi; 1-6	w.	sl(pr).; pyt.; dg.; Red soil in some hills used for tiles etc.
Navsari; 9-0	Navsari; 8-0 Sun.	Ambada; 1-2	w.	mq.
Udwada; 9-0	Rohina; 2-0 Thu.	Rohina; 2-0	w.	sl(pr).; lib.
		deserted		
Songadh; 19-0	Songadh; 19-0 Sun	Mandvi; 12-0	w.	sl(pr).; pyt.; tl.; dg. Fortress and some historical ruins.
		deserted		
Bulsar; 53-0	Nani Vahiyal; 22-0 Thu	Dharampur 33-0	p.	
Umerpada; 7-0	Umerpada; 7-0		w.	sl(pr).; cs.
Vankal; 10-0	Amba; 3-0 Sat	Godsamba; 5-0	w.	sl(Lokshala).; pyt.; Unregistered cs.; dg.
Vyara; 7-0	Local; Fri.	Kanja; 5-0	w.	sl(pr).
Songadh; 16-0	Umarada; 3-0 Tue	Songadh; 16-0	w.,rv.	sl(pr)
Timberva; 2-0	Kadod; 5-0 Sun	Local;	w.,rvt.	pyt.; cs.(c.).; tl.; dh.; ch.
Songadh; 6-0	Songadh; 6-0 Sun.	Songadh; 6-0	w.	
Sayan; 5-0	Surat; 11-0 Sat.	Local.	w.,pl	3sl(2pr.,m) : pyt.; cs. (c.).; fr (Ct Sud 15).; tl.; M.; 4mq.; 3dg.; dh.; ch.; 2lib.; 3dp.
Sayan; 5-0	Surat; 11-0 Sat	Kamrej; 2-0	w.,rv.	sl(pr).; pyt.; 3tl.; lib.
Rankuva; 5-0	Fadwel; 4-0 Fri.	Local;	w.	sl(pr).; 3tl.; dg.; lib.
Billimora; 7-0	Chikhali; 0-2	Local.	w.	sl(pr).; pyt.; 3tl.; 2dg.
Udwada; 4-4	Rohina; 2-0 Thu.	Paria; 1-0	w.,t.	
Vyara; 9-0	(i) Balpur; 4-0; Mon.	Vyara; 9-0	w.	sl(pr).; pyt.
Vyara; 2-0	Vyara; 2-0; Sat.	Vyara; 2-0	w.	sl(pr).; pyt.; cs.; ch.
Vyara; 1-4	(i) Balpur; 1-4; Mon. (ii) Vyara; 1-4; Sat.	Bamnamal-najik; 1-0	w.	sl(pr).; pyt.; cs.; lib.
Bulsar; 29-0	Mandava; 4-0; Fri.	Nana-pondha; 4-0	n.,p.	sl(pr).

Sr. No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati; 1	Direction: Travelling distance. from taluka peta H. Q. 2	Area (sq. miles.); Households; Population Agricultural Population. 3	Post office; Distance in miles. 4
964	Kīher VLD.; કીહેર	N; 7-0	2.4; 724; 151; 688	Local;
965	Kikākuī SGD.; કીકાકુઈ	NW; 6-0	2.9; 888; 140; 862	Songadh; 6-0
966	Kikaralā PRD.; કીકરલા	S; 6-0	1.6; 848; 138; 727	Rentlaw; 1-0
967	Kikavāḍ BRD.; કીકવાડ	E: 4-0	2.7; 805; 165; 756	Bardoli; 4-0
968	Kīmaḍuṅgarā Mdv.; કીમડુંગરા	N: 8-0	1.3; 430; 61; 430	Mandvi; 8-0
969	Kimāmalī OPD.; કીમામલી	E; 14-0	1.7; 629; 92; 439	Kim; 2-0
970	Kobā OPD.; કોબા	N; 6-0	2.4; 335; 70; 330	Olpad; 8-0
971	Kocaravā PRD.; કોચરવા	S; 10-0	1.5; 808; 172; 705	Koparli; 2-4
972	Kochvāḍā BLR.; કોચવાડા	E; 7-0	0.5; 296; 63; 220	Kalwada; 1-4
973	Kodādā MHW.; કોદાદા	SW; 2-0	1.7; 389; 66; 383	Mahuwa; 2-0
974	Kol OPD.; કોલ	S: 1-0	0.1; ....deserted	....
975	Kolak PRD.; કોલક	W; 8-0	0.8; 2950; 574; 362	Local;
976	Kolakhaḍı MDV.; કોલખડી	N; 9-4	0.6; 175, 24; 175	Zankhvav; 5-0
977	Kolākui MDV.; કોલાકુઈ	NW; 12-0	1.5; 196; 37; 196	Bodhan; 4-0
978	Kolasāṇā MDV.; કોલસાણા	NW; 12-0	0.6; 95; 16; 95	Bodhan. 7-0
979	Kolāsaṇā NVR.; કોલાસણા	NE; 6-0	1.0; 521; 111; 330	Maroli; 1-0
980	Kolavā GND.; કોલવા	N; 5-0	1.4; 603; 122; 407	Local;
981	Kolaverā DRP.; કોલવેરા	SE; 33-0	1.5; 241; 48; 241	Dharampur; 33-0
982	Kolibharathāṇā KMJ.; કોલીભ-રથાણા	E; 3-0	2.5; 683; 137; 591	Kamrej; 3-0
983	Koparalī PRD.; કોપરલી	S; 11-0	3.2; 1804; 346; 972	Local;
984	Kos MHW.; કોસ	S; 19-4	2.9; 1766; 330; 1428	Anaval; 1-0
985	Kosād CRS.; કોસાદ	NE; 6-0	3.7; 2235; 482; 1623	Local;
986	Kosāḍī MGL.; કોસાડી	W; 3-0	1.6; 1102; 228; 998	Simodra; 1-0

Railway St.; Distance. 5	Weekly Bazar; Distance; Bazar Day. 6	Motor Stand; Distance. 7	Drinking water facilities 8	Institutions and other information. 9
Local;	Loterva; 0–4;	Madhi; 3–0	w.,rv.	sl(pr).
Doswada; 2-4	Songadh; 6–0; Sun.	Songadh; 6–0	w.	sl(pr).; pyt.; cs.; ch.; cch.
Rentlaw; 1–0	Motiwada; 2–0; Tue.	Local;	w.,t.	sl(pr).
Bardoli; 5–0	—	Vankaner; 0–4	w.	2sl(2pr).; pyt.; tl.; ch.
Zankhvav; 8–0	Devgadh; 4–0; Thu.	Junwan; 2–0	w.	sl (lokshala).; unregistered cs.
Kim; 2–0	Surat; 13–0; Sat.	Kim; 2–0	w.	sl(pr).; 2tl.
Kim; 11–0	Surat; 18–0; Sat.	Takarma; 3–0	w.	sl(pr).; cs.; 2tl.; dg.
Vapi; 8–0	Pandore; 1–0; Wed.	Vapi; 8–0	w.	sl(pr).; fr (Mgh Vad 13).; tl.
Bulsar; 7–0	Bulsar; 7–0;	Kaluwada; 0-2	w.	sl(pr).; fr (An Vad 14).; tl.; dp.
Bardoli; 1–4	Mahuwa; 1–4; Mon.	Mahuwa; 2–0	w.,t.	sl(pr).; pyt.; Ruins of ancient city—coins and foundations of buildings can be found out–Also there is a Shiva temple some 700 years old—The old city was known as કોદુમપુરી—Kaudumpuri.
		... ... deserted.		
Udwada; 4–0	Motiwada; 4–0; Tue.	Udwada; 1–0	w.	sl(pr).; pyt.;cs.(c).; 2tl.; mq.; dg.; dh.; gym.; lib.; 2dp.
Zankhvav; 5-0	Devgadh; 1–4; Thu.	Devgadh; 1–0	w.	cs.
Kim; 16–0	Bodhan; 4–0; Mon.	Nogama; 2–0	w.	
Kim; 20–0	Bodhan; 7–0; Mon.	Nogama; 3–0	w	sl(pr).; 2tl.; lib.; dp.
Maroli; 1-0	Maroli; 1-0;	Asunder; 1-0	w.	sl(pr); pyt.; fr (An Vad 14).; tl.; mq.; dh.; lib.
Amalsar; 3-0	Sari Bujarang; 3-0;	Local;	w.	
Bulsar; 51–0	--	Chiwal; 23 0	rv.,w., p.	sl(pr); pyt; 2tl; lib.
Chalthan; 10–0	Surat; 11-0; Sat.	Kamrej; 3–0	w.	sl(pr); pyt; tl; dp.
Vapi; 6–0	Pandore; 1–4; Wed.	Vapi; 6–0	w.	sl(pr).; pyt.; cs.(c).; tl.; ch.; lib.
Anaval; 1–0	Anaval; 1–0; Wed.	Anaval; 1–0	w.,t.	3sl(2pr., Urdu).; pyt.;
Utran; 2–0	Surat; 6–0; Sat.	Ashvini Kumar; 2-4	w.	2cs.(c.); 5tl.; mq.; dg.; 2dh.; ch.; lib.; 2dp.
Simodra; 1–0	Mangrol; 3–0;	Mangrol; 3–0	W.,rv.	Sl(pr).; pyt.; cs.; mq.; 4dg.

Sr. C.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati; 1	Direction; Travelling distance. from taluka peta H. Q. 2	Are (sq. miles.); Population Households; Agricultural Population. 3	Post office; Distance. in miles 4
987	Kosāḍī MDV.; કોસાડી	W; 6–0	1.2; 617; 122; 605	Kadod; 1-0
988	Kosam OPD.; કોસમ	SE; 4–0	1.6; 403; 87; 380	Karamla; 2-0
989	Kosamāḍā KMJ.; કોસમાડા	W; 8–4	2.9; 726; 133; 593	Vav; 2-0
990	Kosamāḍī KMJ.; કોસમાડી	S; 6–0	1.6; 614; 101; 459	Local;
991	Kosāmaḍī VRA.; કોસામડી		0.8; ... deserted	....
992	Kosamakuvā BLR.; કોસમકુવા	S; 18–0	1.3; 571; 104; 59	Vankal; 5-0
993	Kosamakuvā VRA.; કોસમકુવા	SE; 18–0	0.8; 81; 14; 81	Local;
994	Kosaṁbā BLR.; કોસંબા	N; 3–0	1.3; 2771; 539; 1588	Local;
995	Kosaṁbā MGL. કોસંબા:	W; 15–0	6.4; 4469; 902; 1803	Local;
996	Kosīmapāḍā DRP.; કોસીમપાડા	E; 22–0	1.0; 149; 31; 149	Dharampur; 22-0
997	Kotalagāṁ DRP.; કોતલગામ	SE; 37–0	0.3; 55; 11; 55	Pendha; 4-0
998	Kothā Gnd. કોથા	NE; 7–0	1.9; 1292; 259; 833	Local;
999	Kothamaḍī NVR. કોથમડી;	SW; 6–4	1.9; 1465; 295; 1228	Local;
1000	Koṭhār DRP.; કોઠાર	S; 13-0	2.3; 674; 112: 674	Sukhala; 4-0
1001	Kothawā MGL.; કોઠવા	SW; 14–0	1.4; 256; 56; 178	Kim; 1-0
1002	Kuced NVR.: કુચેદ	N; 8–0	1.4; 876; 163; 696	Veshma; 2-0
1003	Kuḍasad OPD.; કુડસદ	W; 12–0	5.4; 1223; 229; 986	Local;
1004	Kuidā SGD.; કુઇદા	SE; 32–0	0.8; 402; 63; 392	Navapur; 20-0
1005	Kuilivel SGD.; કુઇલીવેલ	NE; 12–0	0.9; 211; 32; 198	Songadh; 12-0
1006	Kukaḍā BNS.; કુકડા	E; 3–0	1.2; 386; 65; 380	Bansda; 4-0
1007	Kukaḍājar SGD.; કુકડઝર	S; 7–0	0.7; 49; 6; 49	Songadh; 7-0
1008	Kukarā Dungari SGD.; કુકરા ડુંગરી	SW; 7–0	0.8; 155; 23; 155	Songadh; 7-0
1009	Kukerī CKL.; કુકેરી	NE; 9–0	4.3; 2446; 433; 2073	Surkhai; 0-4
1010	Kumakotar MHW.; કુમકોતર	S; 14–0	2.3; 541; 97; 519	Kharoli; 2-4

Railway St.; Distance.		Weekly Bazar; Distance; Bazar Day.			Motor Stand; Distance.		Drinking water facilities	Institutions and other information.
5		6			7		8	9
Madhi;	5-0	Kadod;	1-0;	Sun.	Kadod;	1-0	rv.,w.	sl(pr).; tl.; dg.
Sayan;	5-0	Surat;	16-0;	Sat.	Vahiyar;	2-0	w.,p.	sl(pr).; cs.; tl.; dp.
Chalthan;	6-0	Surat;	6-0;	Sat.	Antroli;	2-4	w.	sl(pr).; pyt.; tl.; ch.; lib.
Surat	5-0	Surat	5-0	Sat.	Local		w.	sl(pr).; pyt.; cs.(mis).; tl.; ch.; dp.
					deserted			
Bulsar;	14-0	Chichai;	1-0	Sat.	Dharampur;	5-0	w.	sl(pr).
Unai;	3-0	Panchol;	1-0	Fri.	Dolvan;	4-0	w.	pyt.
Bulsar;	3-0	Bulsar;	3-0		Bulsar;	3-0	w.	3sl(3pr).; pyt.; 3tl.; dh.; dp.
Local		Local			Local		pl.;w. p.	2sl(pr.,m).; pyt.; 2cs. (c.,mis.).; tl.; 2mq.; dg.; 3dh.; ch.; lib.;dp.
Bulsar;	40-0	Umarthana;	3-0	Sat.	Dharampur	22-0	rv.,P.	sl(Lokshala).
Bulsar;	65-0	Huda;	1-0	Tue.	Penth;	12-0	p.	
Amalsad;	3-0	Sari Bujarang;	3-0		Sari Buja-rang.	2-0	w.,t.	sl(pr).; pyt.; cs.(i).; 3tl; mq.; dh.; ch.
Navsari;	5-0	Navsari;	6-0	Sun.	Pethan;	0-4	w.	sl(pr).; pyt.; 4tl.; mq.; ch.; lib.
Vapi.	18-0	Sukhala;	4-0	Fri.	Nana-pondha;	4-0	w.,rv., p	sl(pr).; cs.
Kim;	3-0	Kim;	3-0		Bhatkol;	0-6	w.	sl(pr).; cs.(c.).; Muktamji Bava fr. (Mg sud 1, 2).; mq.; dg.
Navsari;	10-0	Navsari;	9-0	Sun.	Local		w.	sl(pr).; pyt.; 2tl.; dh.; ch.; lib.
Kim;	1-4	Surat;	16-0	Sat.	Kim;	1-4	w.	sl(pr).; pyt.; 2tl.; mq.; 5dg.; ch.
Navapur;	20-0	Navapur;	20-0	Sat.	Navapur;	20-0	rv.	sl(pr).; pyt.; tl.
Songadh;	12-0	Songadh;	12-0	Sun.	Songadh;	12-0	w.	sl(pr).; pyt.; tl.
Kevdi Road	2-0	Kharjai;	3-0	Wed.	Bansda;	3-0	w.,rv.	
Songadh;	7-0	Bandharpada; Mota	3-0	Mon.	Songadh;	7-0	w.	
Songadh;	7-0	Bandharpada; Mota	5-0	Mon.	Songadh;	7-0	w.	sl (lokshala).
Dholikuwa;	2-0	Chapaldhara;	2-2	Sat.	Surkhai;	0-4	w.	3sl(3pr).; pyt ; cs.(c.).; tl.
Dholikuwa;	3-0	Gangadia;	1-0	Mon.	Kharoli;	2-0	w.	sl(pr).; pyt.; fr (Phg Vad). (Fair near Pir Dargah).; tl ; mq.; dg.

Sr. No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati. 1	Direction; Travelling distance. from taluka peta H. Q. 2	Area (square miles); Pop.; Households; Agricultural population. 3	Post office; Distance in miles. 4
1011	Kumakuvā SGD.; કુમકુવા	W; 2-4	2.7; 472; 72; 472	Songadh; 2-4
1012	Kumbhārī OPD.; કુંભારી	NW; 2-2	0.6; 352; 37; 177	Olpad; 5-0
1013	Kumbhāriā CRS.; કુંભારીઆ	E; 5-2	1.1; 1315; 257; 975	Local;
1014	Kumbhāriā PRD.; કુંભારીઆ	W; 1-4	1.2; 553; 106; 552	Pardi; 2-0
1015	Kumbhaseṭ DRP.; કુંભસેટ	S; 51-0	0.5; 49; 9; 49	Dharampur; 51-0
1016	Kumbhiā VLD.; કુંભીઆ	SW; 3-0	1.5; 436; 158; 433	Valod; 3-0
1017	Kumbhiā VRA.; કુંભીઆ	SE; 14-0	1.8; 706; 106; 704	Buhari; 3-0
1018	Kuṇḍā DRP.; કુંડા	S; 15-0	2.8; 211; 33; 211	Dharampur; 15-0
1019	Kuṇḍal CRS.; કુંડલ	NW; 5-0	....deserted ...	....
1020	Kuṇḍī BLR.; કુંડી	NE; 5-4	2.4; 1042; 179; 808	Dungari; 2-0
1021	Kuṇḍiāṇā OPD.; કુંડીઆણા	W; 7-0	3.3; 578; 129; 570	Local;
1022	Kunkaṇī OPD.; કુંકણી	S; 6-0	0.9; 331; 47; 331	Rander; 4-0
1023	Kuṇtā PRD.; કુન્તા	SW; 12-3	1.2; 796; 163; 635	Vatar; 1-0
1024	Kuragām DRP.; કુરગામ	S; 7-0	1.9; 975; 170; 874	Dharampur; 7-0
1025	Kurel NVR.; કુરેલ	E; 11-0	1.5; 702; 150; 611	Local;
1026	Kureliā BNS.; કુરેલીઆ	NE; 4-0	2.7; 982; 180; 952	Unai; 2-0
1027	Kuvād OPD.; કુવાદ	W; 5-0	1.6; 461; 86; 454	Saras; 1-0
1028	Kuwāḍiā BRD.; કુવાડીઆ	S; 11-0	0.3; 65; 12; 60	Sarban; 4-0
1029	Kuwāradā MGL.; કુવારડા	W; 17-0	3.8; 725; 144; 703	Kosamba; 2-0
1030	Ladakuwā MDV.; લાડકુવા	N; 8-0	1.9; 433; 67; 433	Mandvi; 8-0
1031	Lāḍavī KMJ.; લાડવી	S; 8-0	1.6; 513; 92; 492	Kosmadi; 2-0
1032	Lājapor CRS.; લાજપોર	E; 12-2	2.8; 2654; 578; 2242	Local;
1033	Lākaḍabārī BNS.; લાકડબારી	SW; 14-0	2.3; 525; 112; 525	Bansda; 15-0
1034	Lākaḍamāl DRP.; લાકડમાલ	S; 5-0	0.3; 593; 97; 593	Dharampur; 5-0
1035	Lākhagām MDV.; લાખગામ	NE; 7-0	1.1; 473; 71; 455	Mandvi; 7-0
1036	Lakhālī VRA., લખાલી	SE; 10-0	1.5; 561; 86; 557	Vyara; 10-0
1037	Lakhamāpor PRD.; લખમાપોર	E; 14-0	0.4; 160; 30; 137	Mota Vaghachhipa; 3-0
1038	Lākhaṇapor PLN.; લાખણપોર	SE; 5-0	0.5; 771; 162; 567	Veshma; 4-0
1039	Lākhāvāḍī BNS.; લાખાવાડી	SW; 9-4	1.8; 466; 80; 458	Pratapnagar; 3-0
1040	Lāñchakaḍī BNS.; લાંછકડી	S; 5-0	2.5; 611; 121; 611	Bansda; 4-0
1041	Lāṅgaḍ SGD.; લાંગડ	S; 34-0	2.0; 101; 19; 101	Navapur; 16-0

Railway St.; Distance. in miles.	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance. in miles.	Drinking water facilities	Institutions and other information.
5	6	7	8	9
Doswada; 1-4	Songadh; 2-4; Sun.	Songadh; 2-4	w.	sl (lokshala).; pyt.
Sayan; 11-0	Surat; 13-0; Sat.	Olpad; 5-0	w.	dg.
Surat; 5-4	Surat; 6-0; Sat.	Local;	w.	sl(pr).; pyt.; cs.; 2tl.; ch.; lib.; 2dp.
Pardi; 4-4	Sukhlav; 2-0; Fri.	Pardi; 1-4	w.	sl(pr).; pyt.
Bulsar; 69-0	Ozar;; 5-0;	Dharampur; 51-0	rv.,n.	
Madhi; 12-0	Valod; 3-0. Fri.	Valod; 3-0	w.,rv.	sl(pr).
Unai; 5-0	Panchol; 1-4; Fri.	Vakla; 0-4	w.	sl(pr).; pyt.; cs.
Bulsar; 32-0	Mandava; 6-0; Fri.	Dharampur;15-0	rv.,p.	
		deserted		
Dungari; 2-0	Dungari; 2-0;	Kampri; 0-4	w., t.	sl(pr).; pyt.; lib.
Surat; 12-0	Surat; 14-0; Sat.	Local;	w.	sl(pr.).; cs.(mis.); 5tl.; 2dh.; dp.
Surat; 9-0	Surat; 9-0; Sat.	Ambhra; 1-0	w.	sl. (lokshala).; tl.
Vapi; 6-0	Udwada; 6-0; Tue.	Vapi; 6-0	w.	sl(pr.).; tl.; dp.
Bulsar; 18-0	Lakhmapur; 3-0; Sat.	Dharampur; 7-0	w.,p.	sl(pr).; ch.
Navsari; 10-0	Navsari; 9-0; Sun.	Supa; 1-0	w.	sl(pr).; tl.; ch.; lib.
Unai; 2-0	Unai; 2-0; Tue.	Bhinar; 2-0	w.	sl(pr).; pyt.; ch.
Surat; 12-0	Surat, 12-0; Sat.	Olpad; 5-0	w.	sl(pr).; ch.
Bardoli; 10-0		Bardoli, 10-0	w.	
Kosamba; 2-0	Kosamba; 2-0;	Kim; 3-0	w.; rv.,p	sl. (pr.).; pyt.; cs(c.) Balpir fr.(Kt. Vad 12) 4tl.; dg.; ch.; lib.
Vankal; 9-0	Devgadh; 4-0. Thu.	Junwan; 3-0	w.	sl. (lokshala).; c.s(c) unregistered.).
Chalthan; 6-0	Surat; 5-0; Sat.	Umbhel; 1-0	w.	sl(pr).; tl.; ch.
Sachin; 3-0	Surat; 5-0, Sat.	Local.	w.	sl(m.).; pyt.; 2tl.; 3mq.; 4dg.; ch.; 2lib.; 2dp.
Unai; 22-0	Anklach; 1-0; Sat.	Dharampur; 8-0	w., str	sl (pr).; 2tl.
Bulsar; 23-0	Nani Vahiyal; 1-0; Thu.	Dharampur; 5-0	p.	sl(lokshala).
Zankhvav; 8-0	Devgadh; 3-0; Thu.	Gamtalao (Khurad); 3-0	w.	sl (lokshala).; pyt.; cs.; dg.
Vyara. 10-0	Balpur; 5-0; Mon.	Vyara; 10-0	w.	sl(pr).; pyt.; ch.
Pardi; 14-0	Local; Sat.	Neori; 1-0	w.; rv.	sl(pr).; cs. (c.); tl.
Gangadhra; 6-0	Veshma; 4-0;	Local;	w.	sl(pr). ; pyt.; tl.; 2lib.
Anaval; 4-0	Chapaldhara; 3-0; Sat.	Kandolpada; 1-0	w., rv.	sl(pr).; ch.
Unai; 11-0	Limzar; 4-0; Sun.	Bansda; 4-0	w., rv., str.	sl(pr.)
Navapur; 16-0	Singana; 5-0; Tue	Virathva; 3-0	w., rv.	

Serial No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati. 1	Direction; Travelling distance. from taluka Peta H. Q. 2	Area (Sq. Miles.); Population.; Households; Agricultural Population. 3	Post office; Distance in miles. 4
1042	Lasakāṇā KMJ.; લસકાણા	W; 4–0	1.5; 575; 95; 439	Varachhali; 2-0
1043	Lasaṇapor MHW.; લસણપોર	S; 18–0	3.2; 946; 158; 931	Anaval; 1-4
1044	Lavacāli SGD.; લવચાલી	S; 20–0	1.6; 80; 13; 80	Songadh; 20-0
1045	Lavāchā OPD.; લવાછા	W; 7–3	3.5; 766; 156; 647	Pinjrat; 3-0
1046	Lavāchā PRD.; લવાછા	S; 18–0	2.0; 1176; 236; 980	Local;
1047	Lavakar DRD.; લવકર	S; 29–0	1.9; 208; 36; 208	Dharampur; 29-0
1048	Laveṭ MGL.; લવેટ	NW; 6–0	4.0; 981; 147; 702	Wankal; 3-0
1049	Līkhavad DRP.; લીખવડ	S; 35–0	1 8; 243; 39; 243	Dharampur; 35-0
1050	Lilāpor BLR.; લીલાપોર	N; 2–0	1.2; 1251; 222; 479	Local;
1051	Līmāḍadā VRA.; લીમાડદા	N; 8–0	2.0; 676; 104; 590	Vyara; 8-0
1052	Līmadhā MDV.; લીમધા	N; 10–4	2.4; 203; 34; 203	Zankhvav; 6-0
1053	Līmalā CRS.; લીમલા	SW; 10–0	2.2; 67; 14; 34	Inchapore; 1-4
1054	Līmazar BNS.; લીમઝર	W; 6–0	4.8; 1865; 368; 1787	Bansda; 5-4
1055	Līṁbāḍā MGL.; લીંબાડા	SW; 7–0	5 1; 955; 212; 882	Velachha; 2-0
1056	Līṁbādī MDV.; લીંબાડી	E; 14–0	deserted	
1057	Līṁbārapāḍā BNS.; લીંબારપાડા	NW; 10–4	1.1; 329; 62; 329	Pratapnagar 3-0
1058	Līṁbāsoṭī SGD.; લીંબાસોટી	SE; 18–0	0 4; 141; 22; 140	Navapur; 12-0
1059	Līṁbāyat CRS.; લીંબાયત	S; 3–0	0.5; 232; 49; 226	Udhna; 0-4
1060	Līṁbī SGD.; લીંબી	N, 10–0	1.6; 312; 52; 307	Songadh; 10-0
1061	Līmodarā MGL.; લીમોદરા	SW; 18–0	2.0; 667; 123; 667	Velachha; 2-0
1062	Līṇḍīād MGL.; લીંડીઆદ	SW; 12-0	2.5; 430; 78; 430	Kim; 5-0
1063	Līṅgad PLN.; લીંગડ	W; 4-0	1 0, 877; 173, 749	Sachin; 4 0
1064	Loṭaravā VRA.; લોટરવા	NW; 4–0	3.0, 759; 142; 755	Kaher; 1-4
1065	Luhārawāḍ MDV.; લુહારવાડ	N; 10–0	2.2; 809, 140; 762	Zankhvav; 4-0
1066	Luherī DRD.; લુહેરી	E; 5–0	3.2; 591; 117; 591	Dharampur; 5-4
1067	Luvārā MGL.; લુવારા	W; 6–0	2 2; 897; 179; 846	Simodra; 2-0
1068	Machāḍ NVR.; મછાડ	W; 5–0	4.0; 1715; 381; 467	Local;
1069	Māchī KMJ.; માછી	NE; 7–0	1.9; 116; 18; 116	Digas; 1-0
1070	Māchīsādaḍā MHW.; માછીસાદડા	SE; 13–0	1.1; 436; 70; 423	Mahuwa; 13-0
1071	Madāv VRA.; મદાવ	S; 2–0	0.5; 216; 36; 207	Vyara; 3-0
1072	Mādhar OPD.; માધર	E; 7–0	1.2; 472; 102; 427	Sayan; 2-0
1073	Madharakui MDV.; મધરકુઈ	NW; 11–4	2.2; 482; 81; 479	Bodhan; 8-0

Railway St.; Distance in miles.	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance in miles.	Drinking water facilities	Institutions and other information.
5	6	7	8	9
Surat; 5-0	Surat; 5-0; Sat.	Local;	w.	sl(pr.); pyt.; tl.; dh.
Anaval; 1-4	Anaval; 1-4; Wed.	Anaval; 1-0	w.	gl(pr.); pyt.; cs.(c.); tl.; lib.
Songadh; 20-0	Songadh; 20-0; Sun.	Songadh; 20-0	rv.	
Surat; 16-0	Surat; 16-0; Sat.	Kundiana; 1-0	w.	sl(pr.).
Vapi; 8-0	Chhibhad-kachh; 4-0; Sun.	Local;	w., rv.	sl(pr).; pyt. fr (fgn Sud 15).; tl.; dh.; lib.; dp.
Bulsar; 47-0	Local; Sun.	Dharampur;29-0	p.	sl(pr).
Wankal; 3-0	Wankal; 3-0; Fri.	Mangrol; 6-0	w.	sl(pr).; pyt.; cs.; tl.; ch.
Bulsar; 60-0	Varwath; 9-0; Sun.	Dharampur;35-0	p	•
Bulsar; 2-0	Bulsar; 2-0	Bulsar; 2-0	w.	sl(pr).; pyt.; M.;mq.
Vyara; 8-0	Vadkui; 2-0 Tue.	Kakadpar; 4-0 (Kanja)	w.	sl(pr).; pyt.;
Zankhvav; 6-0	Devgadh; 1-4 Thu.	Devgadh; 1-4	w.,n.	sl(m).
Surat; 9-0	Surat; 9-0 Sat.	Mota; 0-4 Varachha	w.,	mq. dg.
Anaval; 9-0	Local; Sun.	Kandolpada; 5-0	w.,str.; rv.	sl (pr).; pyt.; cs.(c).; 4tl.; ch.
Velachha; 2-0	Velachha; 2-0	Tadkeshwars,6-0	w.,rv.	sl (pr).; pyt.; cs.; 2tl.; dh.; ch.
....	....	deserted	....	....
Anawal; 5-0	Vaghabari; 2-0 Thu.	Pratapnagar, 3-4	w.,rv.	sl (pr).; tl.
Navapar; 12-0	Navapur, 12-0 Sat.	Navapur, 12-0	rv.	pyt.
Udhna; 0-2	Surat; 5-0 Sat.	Udhna; 0-1	w.	
Songadh; 10-0	Songadh; 10-0 Sun.	Songadh; 10-0	rv.	sl (pr).
Velachha; 2-0	Velachha; 2-0	Karanj; 1-0	w.,p.	sl(pr).; 2tl.; dg.
Kim; 5-0	Kim; 5-0	Karanj; 0-4	w.,p.	sl(pr).; 2tl.; dg.; ch.
Sachin; 4-0	Palsana; 4-0	Palsana; 4-0	w.	sl (pr).; pyt.; cs.; (mis).; tl.; M.; lib.
Kaher; 1-4	Kaher; 1-4 Tue.	Bajipura; 3-0	w.	sl (pr).; cs.; (mp).
Zankhvav; 4-0	Devgadh; 1-4 Tue.	Devgadh, 1-4	w.,n.	sl (m).; cs.
Bulsar; 23-4	Amba-Talat; 5-0	Dharampur; 5-0	w.,rv.n	sl (pr).; dg ; ch.;
Asarma; 1-0	Velachha; 4-0	Simodra. 1-4	w.,p.	sl(pr); cs.; tl; mq.; 3dg.
Navsari; 4-0	Navsari; 5-0 Sun.	Pethan; 3-0	w.	sl (pr).; pyt.; mq.
Bardoli; 10-0	Bardoli; 10-0	Digas; 1-0	w.,rv.	pyt.
Anaval; 7-0	Valvada; 2-4 Sun.	Valvada; 2-0	w.	sl (pr).; tl.
Vyara; 3-0	Vyara; 3-0 Sat.	Vyara; 2-0	w.,rv.	pyt.
Sayan; 2-0	Surat; 12-0 Sat.	Paria; 1-0	w.	sl (pr).; pyt.; cs. (mis).; tl.; ch.
Kim 22-0	Amba; 4-0 Sat.	Zab; 3-0	w.	pyt.; fr.; (An.Sud 10).

Serial No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati. 1	Direction; Travelling distance. from taluka Peta H. Q. 2	Area (Sq. Msile); Population; Households; Agricultural Population. 3	Post office; Distance in miles 4
1074	Maḍhī BRD.; મઢી	W; 10-0	3.2; 3093; 592; 1597	Local;
1075	Madhurī DRP.; મધુરી	E; 24-0	0.3; 84; 21; 84	Pendha; 9-0
1076	Madhuban DRP.; મધુબન	S.; 35-0	2.6; 650; 112; 650	Dharampur; 35-0
1077	Magadallā CRS.; મગદલ્લા	W; 5-4	1.0; 685; 149; 490	Local;
1078	Magarakui VRA.; મગરકુઈ	SE; 3-4	1.8; 700; 119; 689	Kapura; 2-0
1079	Magatrā MDV.; મગાત્રા	E; 11-0	0.9; 66; 10; 66	Mandvi; 11-0
1080	Magob CRL. મગોબ	E; 4-1	0.8; 383; 78; 340	Surat; 2-0
1081	Magob NVR. મગોબ	W; 15-0	4.0, 174; 41; 84	Maroli; 8-0
1082	Magod BLR. મગોદ	S; 6-0	3.6; 2849; 527; 770	Local;
1083	Mahamadpor OPD. મહમદપોર	NE; 3-0	0 9; 462; 64; 312	Olpad; 4-0
1084	Mahoṇī CRS. મહોણી	E; 9-0	1.4; 712; 115; 694	Local;
1085	Mahuḍī MHW. મહુડી	E; 2-0	0.8; 154; 37; 154	Mahuwa; 3-0
1086	Mahuḍī MDV. મહુડી	E; 10-0	0.7; 52; 7; 52	Mandvi; 11-0
1087	Mahudī NVR. મહુડી	SE; 13-0	1 7; 821; 156, 813	Nagdhara; 1-4
1088	Mahuḍī SGD. મહુડી	SW; 14-0	0.9; 128; 24; 107	Vyara, 7-0
1089	Mahuvā MHW. મહુવા	Head-quarters	2.1; 2133, 448, 1126	Local;
1090	Mahuvar NVR. મહુવર	NW; 8-0	1 3; 2566; 477; 358	Maroli; 1-0
1091	Mahuvariā MHW. મહુવરીઆ	S, 16-0	4 5; 1941; 310; 1933	Anaval; 5-0
1092	Mahuvās BNS. મહુવાસ	E; 5-0	2.7; 629; 122; 453	Bansda; 3-0
1093	Mahuvej MGL. મહુવેજ	SW; 11-0	4.1; 682; 134; 673	Kosamba; 3-0
1094	Maiyālī SGD. મૈયાલી	S; 12-0	1.1; 220; 41; 220	Songadh; 12-0
1095	Majīgām CKL. મજીગામ	W; 2-0	1.8; 1297; 259; 1289	Chikhali; 2-0
1096	Majurā CRS. મજુરા	S, 1-0	1.6; 858; 197; 522	Surat; 1-0
1097	Mākaḍaban DRP. માકડબન	S; 7-0	7.4; 874; 164; 862	Dharampur; 7 0
1098	Mākaṇajher MDV. માકણઝેર	NE; 6-0	1.7; 182; 28; 182	Mandvi; 6-0
1099	Mākhiṅgā PLN. માખીંગા	W; 1-0	1.1; 376; 84; 332	Palsana; 1-0
1100	Māḷ SGD. માળ	S; 34-0	2 0; 114; 19; 114	Navapur; 20-0
1101	Māladhā MDV. માલધા	NE; 10-0	2.0; 698; 121; 679	Mandvi; 10-0

Railway St; Distance in miles.	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance in miles.	Drinking water facilitis	Institutions and other information.
5	6	7	8	9
Local;	Surali; 0–1 Thu.	Sulali; 0–1	w.,rv.	4sl (3pr,, m).; pyt;. cs.; (mp).; 3tl.; dh.; ch.; lib.; 4dp.
Bulsar; 58–0	Huda; 5–0 Tue.	Dharampur;23–0	p.,rv.	
Bulsar; 52–0	Rakholi; 5–0 Fri.	Rakholi; 5–0	rv.,P.	sl(pr).
Surat; 5–0	Surat; 6–0 Sat.	Surat; 5–0	0.	sl(pr).; tl.; dp.
Vyara; 5–0	Vyara; 4–0. Sat	Kapura; 1–0	w.	sl(pr).; pyt.; cs.
Madhi; 18–0	Pipalwada; 4–0 Sat.	Mandvi; 11–0	rv.	
Surat; 2–0	Surat; 2–0 Sat.	Local;	w.	
Maroli: 8–0	Maroli: 8–0	Parsoli: 2–0	w.	pyt; tl.; dg.
Bulsar; 6–0	Bulsar; 6–0	Bulsar; 6–0	w.	3sl(3pr).; pyt.; fr. (An Sud 8).; 3tl.; ch.; lib.; dp.
Sayan, 7–0	Surat: 15–0 Sat.	Local;	w.	sl(pr).; 2tl.; lib.
Niol: 2–4	Surat; 10–0 Sat.	Althan; 2–4	w.	sl(pr).; tl.; mq.; dg.; ch; dp.
Bardoli, 10–0	Mahuwa; 3-0 Mon.	Mahuwa: 2–0	w.	
Madhi, 18–0	Pipalwada: 4-0 Sat.	Mandvi: 10-0	w.	sl(pr).
Navsari; 13–0	Navsari, 12–0 Sun	Satem: 2–0	w.	
Vyara, 7–0	Vyara: 7-0 Sat.	Vyara, 7–0	w.,rv.	pyt.
Bardoli; 9–0	Local; Mon.	Local:	w.,rv.	2sl(2pr).; pyt.; cs.(c.).; 2tl.; 2mq.; 2dg.; dh.; ch; lib; dp; cch.
Maroli, 1–0	Maroli, 1-0	Local:	w	2sl(pr.,h).; pyt.; 4tl.; mq.; ch.; 2lib.; 6dp.
Anaval; 5-0	Anaval, 5–0 Wed.	Local;	w.	ls(pr),; pyt.; 2cs. (c.; mp.).; lib.
Kevdi Road;2–0	Bansda, 3-0 Fri.	Bansda, 5–0	w.,rv.	sl(pr).; ch.
Hathuran; 2-0	Kosamba; 3-0	Kosamba, 3-0	w.,P.	sl(pr).; tl.; mq.; 2dg.; ch.; lib.
Songadh; 12–0	Bandharpada Mota. 4-0 Mon.	Vyara; 13–0	w.	pyt.
Bilimora, 5-0	Chikhali, 1–0	Chikhli; 2-0	w.	sl(pr).; pyt.; cs.(c.).; fr (An. Vad 14).; dh.; ch.
Surat: 2-4	Surat, 1-0 Sat.	Surat, 1–0	w.	sl(pr).
Bulsar; 26–0	Nani Vahiyal, 3-4 Thu.	Dharampur,7–0	w.,rv., p.	sl(pr).
Zankhvav; 7 0	Devgadh; 3 0 Thu.	Gam Talao:1–0 (Khurad)	w.	sl(pr).; cs.
Chalthan; 5–0	Palsana; 1-0	Palsana; 1–0	w.	pyt; mq.; dg.
Navapur, 20-0	Singana; 7-0 Tue.	Virathva, 4–0	w.,rv.	
Zankhvav; 7–0	Devgadh; 2-0 Thu.	Junwan; 0–4	n.,w.	sl(lokshala).; pyt.; cs. (c.).; unregistered.; ch.;

Serial No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati. 1	Direction; Travelling distance. from taluka Peta H. Q. 2	Area (sq. miles); Population; Households; Agricultural population. 3	Post office; Distance in miles. 4
1102	Mūlagāmā CRS.; માલગામા	W; 6–2	1.1; 301; 58; 291	Bhesan: 2-0
1103	Mālaghar DRP.; માલઘર	SE; 40–0	5.0; 627; 132; 627	Penth; 9-0
1104	Malaṅgadev SGD.; મલંગદેવ	SE; 27–0	4.7; 436; 85; 426	Navapur; 15-0
1105	Malavāḍā CKL.; મલવાડા	W; 2–4	0.4; 498; 78; 439	Chikhali; 3-0
1106	Mālavaṇ BLR.; માલવણ	N; 12–0	13.0; 5110; 1181; 2628	Local;
1107	Mālekapor PLN.; માલેકપોર	N; 3–0	1.1; 1448; 276; 1314	Palsana; 2-0
1108	Maliādharā CKL.; મલીઆધરા	S; 4–4	1.2; 934; 167; 510	Pipalgabhan; 2-4
1109	Mālothā VRA., માલોઠા	S; 6–0	0.8; 128; 26; 128	Kapura; 1-0
1110	Māluṅgī DRP.; માલુંગી	S; 47–0	1.5; 172; 31; 172	Dharampur; 47-0
1111	Māmābhācā DRP.; મામાભાચા	E; 22–0	1.9; 331; 73; 325	Dharampur; 22-0
1112	Manāicondhī DRP.; મનાઈચોંઢી	E; 18–0	1.9; 194; 40; 184	Dharampur; 18-0
1113	Mānakunvā BNS.; માનકુનિયા	SE; 6–0	8.1; 946; 221; 946	Bansda; 6-0
1114	Manāḷā DRP.; મનાળા	SE; 22–0	1.6; 290; 56; 290	Dharampur; 22-0
1115	Manapur BNS.; મનપુર	E; 2–0	3.1; 556; 121; 555	Bansda; 2-0
1116	Manḍakol OPD.; મંડકોલ	S; 1–0	.... deserted ..	....
1117	Mānḍaḷ SGD.; માંડળ	W; 6–0	2.7; 576; 94; 522	Songadh; 6-0
1118	Mānḍan MGL., માંડણ	E; 12–0	6.5; 655; 106; 621	Wankal; 4-0
1119	Mānḍan (Valiā) MGL.; માંડણ (વાલીઆ)	E; 8–0	0.5; 213; 40; 213	Wankal; 8-0
1120	Mānḍavā DRP.; માંડવા	S; 14–2	10.9; 1321; 256; 1321	Dharampur; 14-0
1121	Mānḍavakhaḍak CKL.; માંડવખડક	E; 18–4	4.8; 1930; 373; 1915	Fadwel; 8-0
1122	Mānḍavī MDV. માંડવી	Head-quarters	2.5; 7479; 1502; 2002	Local;
1123	Mandir NVR.; S; મંદીર	S; 6–0	3.3 1840; 394; 1402	Local;

Railway St; Distance.	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance.	Drinking water facilities	Institutions and other information.
5	6	7	8	9
Surat; 7–0	Surat; 7–0 Sat.	Bhesan; 1–4	w.,p.	sl(pr).; dg.
Bulsar; 8–0	Huda; 5–0 Tue.	Penth; 10–0	p.	sl(pr).; tl.
Navapur; 15–0	Singana; 1–0 Tue.	Virathva; 1–4	w.	sl (lokshala).; pyt.; cs. (mp.); tl.; ch.
(i) Chikhali 3–0 Road. (ii)Bilimora; 7–0	Chikhali: 3–0	Chikhali; 3–0	w.	sl(pr).
Dungri; 4–0	Dungri : 4–0	Dungri; 4–0	w.,t.	3sl(3pr).; pyt.; cs.(c).; 14tl.; mq.; 3dg.; ch.; 2lib.; 2dp.
Chalthan; 5–0	Palsana; 2–0	Palsana, 2–0	w.	sl(pr).; pyt.; cs.(c).; fr. (Ct. Sud 15).; mp.; dg.; ch.; 2?lib.
(i) Bili-; 10-0 mora. (ii) Chikhali 4–4 Road.	Vad; 4–0 Wed.	Chikhali; 4-4	w.	pyt.; cs.(c.).
Vyara; 6–0	Vyara; 6–0 Sat.	Local,	w.,rv.	pyt; cs.
Bulsar. 65–0	Ozar: 5-0 Tue.	Kapiada; 20–0	rv.,p.,n.	
Bulsar. 40–0	Umarthana. 12 0 Sat.	Dharampur;24–0	rv.,p.	sl (lokshala).
Bulsar; 36–0	Umarthana. 7–0 Sat.	Dharampur:18–0	rv.,p.	sl (pr).
Unai; 13-0	Bansda. 6–0 Fri.	Bansda, 6–0	w.,rv.	sl (pr); pyt; cs; (c);ch.
Bulsar; 46–0	Mandva . 3-0 Fri.	Nanapon- 13–0 dha (Chiwal);	p.,rv.	
Unai; 9–0	Bansda . 2–0 Fri.	Bansda; 2–0	w.,rv.	2sl (pr.; lokshala).
....	....	deserted	....	....
Doswada; 2-0	Songadh: 6–0 Sun.	Songadh; 6–0	w.,rs.	rv,sl (lokshala).; pyt.; cs.; ch.
Wankal: 4–0	Wankal . 4–0 Fri.	Zankhvav; 2–0	w.,n.	
Zankhvav, 2–0	Zankhvav. 3–0	Zankhvav; 3–0	w.,p.,n.	sl (pr).
Bulsar ; 32–0	Local. Fri.	Nanapon- 5–0 dha (Chiwal);	w.,p.	2sl (2pr).; tl.; ch.
Bilimora; 21–0	Fadwel; 8–0 Fri.	Fadwel; 8–0	w.	sl (pr).; pyt.; 2tl.
Madhi, 8–0	Local, Wed.	Local;	rv. w.	6sl (5pr, h).; pyt..; cs.,; fr (Srn. Sud, 8, Srn. Vad 9 and Srn.. Vad 15).; 16tl.; 3mq.; 5dg.; 2dg 2dh,ch.; lib 5dp.
Vedchha; 2–0	Navsari; 6–0 Sun.	Local;	w.	sl (pr).; pyt.; 4tl.; M.; mq.; dh.

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1124	Mandroi ;OPD.; મંદ્રોઈ	N; 7–0	14.5; 682; 141; 508	Olpad; 7-0
1125	Māṇekapor ;BRD.; માણેકપોર	E; 8–0	3.5; 1164; 257; 1132	Local;
1126	Māṇekapo ; CKL.; માણેકપોર	E; 5–4	1 3; 972; 205; 718	Bamanvel; 2-0
1127	Māṇekapor ;GND.; માણેકપોર	N; 4–4	1.4; 620; 120; 552	Gandevi; 5-0
1128	Mānekapo. ;NVR.; માણેકપોર	NW; 3–4	1.1, 826; 176; 724	Kasbapar; 1-0
1129	Mangaḷiā ;NVR.; મંગળીઆ	N; 17–0	1 5; 367; 64; 367	Buhari; 4-0
1130	Māṅgrol ;MGL.; માંગરોળ	Head-quarters	2 0; 2911, 546; 1925	Local;
1131	Māṅgarol .NVR.. માંગરોલ	W; 13-0	3 1; 286; 65, 263	Local;
1132	Mangaroliā ;BRD.; માંગરોલીઆ	E, 8-0	2.0; 409; 83; 366	Akoti, 1-0
1833	Māni ;DRP.; માની	SE, 30-0	2.1; 94; 23; 94	Dharampur; 30-0
1134	Mānkaṇā :KMJ.: માંકણા	S: 5–0	1 4, 513; 114; 510	Umbhel; 1-0
1135	Maraghamāl :DRP , મરઘમાળ	SE: 5-0	1 1, 494; 73; 492	Dharampur; 5-0
1136	Maralā ;BLR.. મરલા	E, 12-0	3 5. 1532; 254; 1518	Ronvel; 4-0
1135	Maroli ;NVR.; મરોલી	NW; 8–0	2.5; 1402; 317; 1114	Local;
1138	Māsā ;GND., માસા	W. 10-0	8 1. 3201; 801, 1365	Local;
1139	Masād ; BRD મસાડ	W; 13–0	1.9; 718. 118; 682	Kadod; 1-4
1140	Māsamā ; OPD.. માસમા	S; 3–4	2 7. 842; 116; 734	Sonsak, 1-0
1141	Masāṇapāḍā ; SGD., મસાણપાડા	S: 15-0	0 5, 191, 34; 190	Songadh; 15-0
1142	Matavād ; GND.. મટવાડ	E; 6–0	1 4; 703; 151; 624	Gandevi; 6-0
1143	Matavād ; NVR.; મટવાડ	W, 7–0	4.6, 5030; 1294; 670	Local;
1144	Mātunā , DRP.. માતુનીઆ	S; 20–0	2 6; 343; 69; 343	Dharampur; 20-0
1145	Mavāchī ; BRD. . મવાછી	N; 4 4	3.5; 657; 135; 575	Mota; 2-0

Railway St.; Distance in miles.	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance. in miles.	Drinking water facilities	Institution and other information.
5	6	7	8	9
Sayan; 11-0	Surat; 17-0 Sat.	Karanj; 3-0	w.	sl (pr).; cs.; (c).; tl.; mq.; 3dg; ch.
Madhi; 2-4	Surali; 2-0 Thu.	Syadala; 1-4	w.,t.	sl (m).; pyt.; cs.; (c).; 2tl.; dh.; ch.; dp.
Rankuva; 2-0	Rankuva: 2-0	Local;	w..	sl (pr).; pyt.; mq.; lib.
Bilimora; 8-0	Gandevi; 5-0 Wed.	Gadat, 2-0	w,rv.	sl (pr),; pyt.; cs .; (c).; tl.: mq.; lib.
Navsari; 2-0	Navsari, 3-0 Sun.	Navsari; 2-0	w.	sl (pr).; pyt.; ch.; lib.
Unai; 7-0	Balpur; 1-0 Mon.	Bamnamal-najik 5-0	w.	sl (pr).; pyt.
Local.	Local.	Local,	w.,p.	3sl (2pr.; m).; pyt.; 2cs.; (c.;mp.;) fr (Ps. sud2);3tl.; 2mq.;4dg.; - 2dh.; gym.; ch; lib; 3dp.
Maroli; 5-0	Maroli; 5-0	Local;	w.	sl (pr).; pyt.; tl.; ch.; lib.; dp.
Timberva: 2-0	Surali. 4-0 Thu.	Madhi: 3-0	w.	sl (pr).; 2tl.; dg,; ch; lib.
Bulsar. 53-0	Huda; 3-0 Tue	Penth. 10-0	rv.,p.	
Chalthan. 4-0	Surat. 5-0 Sat.	Valthan; 1-0	w.	sl (pr).; pyt.; cs.; (c).; tl.
Bulsar. 21-0	Vadpada; 1-4 Tue.	Wankal. 5-0	w.,rv	sl (pr).; tl.
Bulsar. 12-0	Navera . 4-0 Sun.	(i) Khergam 2-4 (ii) Dandivali 2-4	w.	2sl (2pr).; pyt,; 2tl.; 2dg.
Local:	Local;	Local;	w.,p.	sl (pr).; pyt.; 4tl.; mq.; dg.; ch.; lib.
Amalsad. 5-0	Sari Bujarang. 5-0	Panar. 2-4	w.	3sl (3pr),; pyt.; cs.; fr. (An. Vad 14); Ps. Makar Sankranti); tl; dg. dh,; ch; lib.
Madhi. 5-0	Kadod: 1-4 Sun.	Kadod: 2-0	w.	sl (pr); tl; ch.
Sayan. 9-0	Surat 9-0 Sat.	Local	w.	sl(m).;pyt.;cs. (fmg.). 3tl.; dh.; ch.; lib.
Songadh: 15-0	Umarda; 1-0 Tue.	Songadh: 15-0	w.,rv.	sl (Lokshala).; pyt.
Chikhali Road, 5-0	Gandevi: 6-0 Wed.	Gandevi. 6-0	w.	sl(pr).; mq.; dg.
Navsari:	Navsari; 8-0 Sun.	Local.	w.	2sl(2pr).; pyt.; 3cs. (3c.).; tl.; mq.; dg; ch.; 2lib.
Bulsar: 38-0	Mandava; 9-0 Fri.	Dharampur 20-0	p.	sl (pr).
Bardoli; 5-0		Bardoli: 4-1	w.	

Serial No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati. 1	Direction; Travelling distance from taluka Peta H. Q. 2	Area (sq. miles); Population; Households; Agricultural Population. 3	Post office; Distance in miles. 4
1146	Māyapur VRA માયપુર	W; 4–0	1.8; 414; 83; 410	Kaher; 3.
1147	Meḍha SGD. મેઢા	S; 15–0	6.2; 425; 66; 414	Songadh; 15.
1148	Meḍhasiṅgī SGD. મેઢસીંગી	S; 6–0	1.2; 307; 50; 307	Songadh; 6.
1149	Meghapur VRA. મેઘપુર	SE; 7–0	2.0; 461; 70; 460	Vyara; 7.
1150	Meghavāl DRP. મેઘવાલ	S; 45–0	2.1; 757; 119; 757	Dharampur; 45-
1151	Meh BLR. મેહ	S; 0–5	0.5; 665; 122; 282	Haria 3-(
1152	Meṇadhā DRP. મેણધા	S; 16–0	4.6; 462; 76; 462	Dharampur; 16-(
1153	Mendhar GND. મેંધર	W; 10–0	11.4; 1920; 380; 209	Amalsad; 6-(
1154	Mīṇakacch CKL. મીણકચ્છ	N; 8–4	1.2; 746; 111; 475	Rankuwa; 2-(
1155	Mīṇḍhābārī BNS. મીંઢાબારી	SW; 4–0	1.6; 600; 134; 559	Bansda; 4-0
1156	Mīṇḍhī OPD. મીંઢી	NW; 4–3	1.1; 201; 43; 193	Olpad. 5-0
1157	Mīrajāpor OPD. મીરજાપોર	NW; 6–1	2.5; 432; 77; 398	Bhagwani Mor 1-0
1158	Mīrajāpur NVR. મીરજાપુર	NW; 5–4	1.1; 522; 123; 504	Chhinam; 1-0
1159	Mīrāpur KMJ. મીરાપુર	N; 10–0	0.4; 117; 27; 107	Sevani; 1-0
1160	Mīrapur VRA. મીરપુર	SE; 7–0	2.3; 284; 45; 284	Vyara; 7-(
1161	Mīyāpur MHW; મીયાપુર	S; 1–2	0.6; 273; 64; 256	Mahuwa; 1-2
1162	Miyāwāḍī BRD. મિયાવાડી	NE; 11–0	2.0, 72; 16, 71	Kadod; 2-0
1163	Mogār NVR. મોગાર	S; 5–0	1.4; 1271; 291; 1173	Dabhel; 1-0
1164	Morgaṇān SGD. મોગરાણ	SE; 43–0	0.6; 248; 42; 234	Khandbara; 18-0
1165	Mogarāvāḍī BLR. મોગરાવાડી	NE; 1–0	1.1; 2121; 440; 173	Local;
1166	Moghavāṇ SGD. મોઘવાણ	S; 10–0	2 3, 817; 140; 812	Songadh; 10-0
1167	Mohanākāvacali DRP. મોહનાકાવચલી	E; 24–0	1.1; 302, 54; 302	Dharampur; 24-0
1168	Mohanapur GND. મોહનપુર	W; 5–4	0.7; 550; 107; 393	Amalsad; 3-0
1169	Mohapāda DRP. મોહપાડા	E; 30–0	1.7; 78; 18; 78	Dharampur; 30-0
1170	Mohapaḍā Malaṅgadev SGD.; મોહપડા મલંગદેવ	SE; 41–0	1.2; 11; 1; 11	Navapur; 16-0
1171	Mohapādā-Nesu SGD.; મોહપાડા નેસુ	SE; 24–0	0.3; 147; 29; 134	Navapur; 9-0
1172	Mohini SGD.; મોહીની	SE; 25–0	1.4; 325; 51; 309	Chinchpada; 8-0
1173	Molā-Āmbā BNS.; મોલા આંબા	S; 12–0	4.2; 686; 158, 679	Bansda; 12-0
1174	Moladharā NVR.; મોલધરા	NE; 6–0	1.5; 1018; 196; 933	Kaliawadi; 5-0
1175	Molavāṇ MGL.; મોલવાણ	SW; 12–0	1.7; 242; 39; 145	Tadkeshwar; 3-0
1176	Molaverī DRP.; મોલવેરી	E; 25–0	0.5; 142; 31; 142	Dharampur; 25-0
1177	Morā CRS.; મોરા	W; 13–0	8.6; 644; 142; 493	Local;

Railway St.: Distance	Weekly Bazar: Distance; Bazar Day.	Motor Stand Distance.	Drinking water facilities	Institutions and other informatiou.
5	6	7	8	9
Kaher; 3-0	Kaher; 3-0; Tue.	Local	w.	sl (lokshala).; pyt.; cs.; ch.
Songadh; 15-0	Songadh; 15-0; Sun.	Songadh, 15-0	w.,rv.	sl (lokshala).; pyt.;ch.
Songadh; 6-0	Songadh; 6-0; Sun.	Songadh; 6-0	w.	sl (lokshala).; pyt.
Vyara; 7-0	Balpur; 4-0. Mon.	Bamnamal- 4-0 najik;	w.,rv.	sl (lokshala).; pyt.; ch.
Bulsar; 50-0	Rakholi; 3-0; Fri.	Dharampur;45-0	rv.,p.	sl(pr).
Bulsar; 7-0	Bulsar; 7-0,	Bulsar; 7-0	w.,rv.	sl(pr).; tl.
Bulsar; 34-0	Mandava; 7-0; Fri.	Dharampur;16-0	rv.,p.	sl(pr).
Amalsad; 6-0	Sari Bujarang; 7-0.	Bilimora; 8-0	w.,t.	2sl(2pr).; pyt; tl.
Chikhali Road.; 5-0	Rankuva; 2-0;	Dowada Vangri; 2-4	w.,rv.	2sl(2pr.); tl.
Unai; 11-0	Bansda 4-0; Fri.	Bansda; 3-4	w.,rv.	sl(pr).
Sayan. 14-0	Surat. 17-0 Sat.	Supan; 0-2	p.,w.	cs; tl.; ch.
Sayan; 16-0	Surat, 18-0. Sat.	Local;	w.,p.	sl(pr).; tl.
Maroli; 3-0	Navsari; 4-0; Sun.	Mahuvar; 3-0	w.	sl(pr),;pyt.; tl; ch.; lib.
Bardoli. 5-0	Bardoli 5-0. Sat.	Local;	w.	pyt; 2tl.
Vyara; 7-0	Balpur 1-0. Mon.	Vyara. 7-0	w.	pyt.
Bardoli. 10-0	Mahuva. 1-2; Mon.	Mahuwa. 1-2	w.	sl(pr).; pyt.; cs.(c.).
Bardoli; 11-0	Kadod. 2-0 Sun.	Kadod 2-0	rv.	tl.
Vedchha. 2-4	Navsari. 4-0. Sun.	Dabhel. 1-4		sl(pr).
Khandbara.18-0	Khandbara. 18-0. Sun.	Nandurbar:25-0	w.	sl (lokshala).; pyt.
Bulsar; 0-4	Bulsar. 0-4.	Bulsar. 0-4	w.,t.	sl(pr),; pyt; fr.; (Mg. Vad 13).; tl.; lib.
Songadh; 10-0	Bandharpada Mota. 3-0.Mon.	Songadh; 10-0	w.	sl(pr).; pyt; cs.
Bulsar; 42-0	Nani Vahiyal:12-0. Thu	Dharampur.24-0	p.,rv.	
Amalsad. 3-0	Sari Bujarang. 3-0;	Kolva; 1-4	w.,t.	sl(pr); tl.
Bulsar 48-0	Nani Vahiyal.18-0 Thu.	Dharampur.30-0	p.	
Navapur. 16-0	Singana. 2-0 Tue.	Navapur. 19-0	w.rv.	sl (lokshala).; pyt.
Navapur 9-0	Navapur. 9-0; Sat.	Navapur. 9-0	w.	pyt.
Chinchpada,8-0	Chinchpada, 8-0, Thu.	Chinchpada;8-0	w.	sl (pr).; pyt.
Unai; 22-0	Chorawani; 4-0, Thu.	Bansda; 12-0	w.rv.	str. sl (pr).
Navsari. 8-0	Navsari; 6-0; Sun.	Bhattai; 1-4	w.rv.	sl (pr).; tl.; pyt.; mq.; lib.
Velachha; 3-0	Velachha; 3-0;	Local.	w.p.	pyt.; dg.
Bulsar. 43-0	Umrthana; 3-0; Sat.	Dharampur:26-0	rv;p.	sl (lokshala).
Surat. 14-0	Surat; 14-0 Sat.	Local;	w.	sl (pr).; fr (Mrg. Vad 13-14) ;4tl.; dg.

Serial No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati. 1	Direction; Travelling distance. from taluka Peta H.Q. 2	Area (Sq. Miles.); Population.; Households; Agricultural Population. 3	Post office, Distance in miles. 4
1178	Moradahād DRP.; મોરડહાડ	E; 28–0	0.5; 68; 13; 68	Dharampur; 28-0
1179	Moradevī VLD.; મોરદેવી	SW; 3–2	2.8; 857; 158; 828	Valod; 3-2
1180	Morāi PRD.; મોરાઈ	SW; 8–2	1.2; 575; 113; 434	Vapi; 5-0
1181	Morathāṇ OPD.; મોરથાણ	E; 4–4	2.3; 679; 97; 636	Sandhier; 2-0
1182	Morathāṇā KMJ.; મોરથાણા	NE; 6–0	2.6; 777; 142; 657	Haldharu; 3-0
1183	Moriṭhā MDV.; મોરીઠા	N; 5–0	1.1; 912; 148; 903	Mandvi; 5-0
1184	Mosāli MGL.; મોસાલી	S; 1–4	1.8; 1437; 314; 865	Local;
1185	Motā BRD.; મોતા	NW; 5–2	8.4; 3553; 753; 2847	Local;
1186	Moṭā Borasarā MGL.; મોટા બોરસરા	S; 14–0	2 4; 626; 110; 519	Kim; 2-0
1187	Moṭā Pondhā DRP.; મોટા પોંઢા	S; 18–0	7.3; 2259; 364; 2072	Local;
1188	Moṭā Sātasilā SGD.; મોટા સાતસીલા	S; 12–0	0 6; 51; 8; 50	Songadh; 12-0
1189	Moṭā-Taḍapāḍā SGD.; મોટા તડપાડા	S; 18–0	1.7; 406; 64; 405	Songadh; 18-0
1190	Moṭāvarāchā CRS.; મોટા વરાછા	NE; 9–8	4 1; 2953; 544; 2070	Local:
1191	Motā Wāghachīpā PRD.; મોટા વાઘછીપા	E; 7–0	1.6; 1588; 272; 1246	Local;
1192	Moṭī Bhamatī BNS.; મોટી ભમતી	E; 1–4	1.2; 501; 104; 401	Bansda; 1-4
1193	Moṭī-Bhaṭalāv BRD.; મોટી ભટલાવ	E; 4–0	1 4; 442; 82; 437	Bardoli; 4-0
1194	Moṭī-Bhūravān SGD.; મોટી ભૂરવાણ	S; 5–0	0.2; 84, 17, 84	Songadh; 5-0
1195	Moṭīcer MDV.; મોટી ચેર	S; 4–4	4.9; 1448; 229; 1304	Tarsada Bargama. 4-0
1196	Moṭī Ḍhol Dungarī DRP.; મોટી ઢોલ ડુંગરી	N; 3–0	1 3; 522; 91; 522	Dharampur; 3-0
1197	Moṭā Faḷīā MGL.; મોટી ફળીઆ	NE; 4–0	3.1; 186; 32; 117	Wankal; 3-0
1198	Moṭī Falod BRD., મોટી ફલોદ	N. 7–7	1.7; 689; 140; 559	Pardi Kadod; 2-0
1199	Moṭī Kāsabāḍī; DRP.; મોટી કાસબાડી	E; 20–0	1.7; 130; 28; 130	Dharampur; 20-0
1200	Moṭī-Kheravāṇ SGD.; મોટી ખેરવાણ	N; 4–0	1.9; 872; 144; 825	Songadh; 4-0

Railway St.; Distance in miles.	Weekly Bazar; Distnce; Bazar Day.	Motor Stand; Distance in miles.	Drinking water facilities	Institutions and other information
5	6	7	8	9
Bulsar; 43–0	Bopi; 12–0 Fri.	Dharampur;28–0	rv.p.	
Madhi; 12–0	Kukanbenda; 2–0 Thu.	Valod; 3–2	w.rv.	sl (pr).; tl.; ch.
Vapi; 5–0	Udwad; 4–0 Tue.	Local;	w.rv.t.	sl (pr).
Sayan; 7–0	Surat; 15–0 Sat.	Sandhier; 2–0	w.	sl (pr).; 2tl.; dg.; dh.
Bardoli; 6–0	Bardoli; 6–0 Sat.	Local;	w.	sl (pr).; pyt.; cs.; (mis).; tl.; ch.; lib.
Zankhvav; 11–0	Mandvi; 5-0 Wed.	Mandvi; 5–0	w.rv.	sl (pr).
Wankal; 6–0	Wankal; 6–0 Fri.	Local;	w.p.	sl (pr) pyt.; 2cs.; tl.; mq.; dg.; ch.; lib.; 2dp.
Gangadhra; 3–0		Local;	w.t.	2sl (2 pr).; pyt.; fr (Kt. Sud 15).; 16tl.; 3dh.; ch.; lib.; dp.
Kim; 2–0	Kim; 2–0	Kim, 2–0	w.rv.	sl (pr).; cs.; (c).; 2tl.; dg.
Vapi; 10–0	Local; Thu.	Vapi; 10–0	w.rv.t.	2sl (pr.; m).; cs.; (mp).; 2tl.; ch.; dp.
Songadh; 12-0	Bandharpada Mota; 3–0 Mon.	Songadh; 12–0	w.	
Songadh; 18–0	Umerda; 2–0 Tue.	Songadh; 18–0	w.rv.	sl (pr).; pyt.
Utran; 2–4	Surat, 4–0 Sat.	Local;	w.	2sl(m. Urdu).; pyt; cs.; fr (Ct. Sud 15).; 4tl.; mq.; 2lib.; 2dp.
Pardi; 9–0	Pardi. 9–0	Panchlai, 1–0	w.	sl(pr).;pyt.; cs.; (c);tl.; dh.; ch.; lib.; 2dp.
Kevdi Road:3–0	Bansada; 1–4 Fri.	Bandsa, 1–4	w.rv.t.	sl (m).; ch.
Bardoli. 5–0			w.	sl (pr).; tl,.
Songadh; 6–0	Songadh; 5–0 Sun.	Songadh; 5–0	rv.w.	pyt.
Madhi; 14–0	Mandvi; 6-0 Wed.	Local;	w.p.	sl (pr).; pyt.; cs.
Bulsar; 21–0	Vadpada; 4–0 Tue.	Dharampur; 3–0	w.rv.	sl (pr).
Wankal; 3–0	Wankal; 3–0 Fri.	Mangrol; 4–0	w.	
Timberava; 5–0	Kadod; 5–0 Sun.	Pardi Khoj; 2–0	w.	sl (pr).; pyt.; 2tl.; ch; lib; dp.
Bulsar; 38–0	Ukta; 10–0 Sun.	Dharampur;20–0	p.	
Songadh; 4–0	Songadh; 4–0 Sun.	Songadh; 4–0	w.	sl (lokshala).; pyt.

Serial No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati. 1	Direction; Travelling distance from taluka Peta H. Q. 2	Area (sq. miles.); Population.; Households; Agricultural Population. 3	Post office; Distance in miles. 4
1201	Moṭi Korawāl DRP.; મોટી કોરવાલ	E; 33–0	2.1; 261; 48; 261	Dharampur; 33-0
1202	Moṭi-Narolī MGL.; મોટી નરોલી	W; 11–0	1.4; 193; 39; 183	Kim; 3-0
1203	Moṭi-Palasan DRP.; મોટી પલસણ	S; 32–0	7.1; 1117; 178; 1117	Dharampur; 32-0
1204	Moṭi-Pāraḍi MGL.; મોટી પારડી	SW; 9–0	2.0; 380; 92; 46	Kosamba; 4-0
1205	Moṭi-Taṁbāḍī PRD.; મોટી તંબાડી	S; 20–0	3.8; 1518; 290; 1309	Vapi; 9-0
1207	Moṭi-Vālazaı DRP.; મોટી વહીયાળ	N; 9–0	2.2; 764; 151; 764	Dharampur; 9-0
1207	Moṭi-Vālazār BNS.; મોટી વાલઝર	N; 5–0	2.5; 1347; 242; 1166	Bansda; 5-0
1208	Moṭiwāḍā PRD.; મોટીવાડા	S; 3–0	1.7; 960; 212; 518	Rentlaw; 0-6
1239	Muḍat MHW;; મુડત	E; 5–0	3.3; 766; 136; 764	Mahuwa; 3-0
1210	Mulad OPD.; મુળદ	E; 15–0	3.3; 861; 154; 804	Kim; 1-4
1211	Mūḷi BLR.; મૂળી	E; 6–3	0.9; 566; 111; 557	Ghadoi; 2-0
1212	Munasād NNR.; મુનસાડ	E; 6–0	3.4; 1653; 371; 1424	Local;
1213	Muñjalāv MDV.; મુંજલાવ	W; 16–0	1.8; 466; 91; 465	Bodhan; 3-0
1214	Muradad DRP.; મુરદડ	E; 20–4	0.5; 231; 50; 231	Dharampur; 20-4
1215	Musā VRA;; મુસા	S; 2–0	1.3; 186; 37; 153	Vyara; 2-0
1216	Nādarakhā GND.; નાદરખા	SE; 4–0	1.5; 1089; 227; 922	Bilimora; 3-4
1217	Nādhaī CKL.; નાધઈ	S; 12–0	1.2; 789; 119; 788	Khergam; 2-0
1218	Naḍod NVR.; નદોદ	NW; 8–0	1 3; 548; 117; 468	Maroli; 2-0
1219	Nagaḍā OPD.; નગડા	E; 4–0	0.2; ....deserted	....
1220	Nāgadhara NVR.; નાગધરા	E; 12–4	4.1; 2857; 545; 1598	Local;
1221	Nāgadharī CKL.; નાગધરી	SE; 11–4	1.7; 296; 40; 296	Rumala; 2-0
1212	Nagaḍadharī(Jungal) DRP.; નગડધરી (જંગલ)	NE; 21–0	3.2; 445; 90; 444	Dharampur; 21-0
1223	Nāgalā BRD.; નાગલા	....	..........deserted	....
1224	Nagar DRP.; નગર	S; 26–0	2.1; 351; 73; 351	Dharampur; 26-0
1225	Naghoi OPD.; નઘોઈ	N; 4–0	1.7; 313; 65; 292	Olpad; 4-0
1226	Nāgoḍ KMJ.; નાગોડ	E; 12–0	2.2; 654; 113; 582	Vihan; 1-0
1227	Naladharā MHW.; નલધરા	S; 5–0	12.3; 6248; 1169; 5567	Karchelia; 1-0

Railway St.; Distance. in miles.	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance in miles.	Drinking water facilities	Institutions and other information.
5	6	7	8	9
Bulsar; 48–0	Dharampura; 33-0 Mon.	Dharampur;33-0	p.	sl(pr).
Kim; 3–0	Kim; 3–0	Kim; 3–0	w.	tl.
Bulsar; 50–0	Sildha; 5–0 Sat.	Dharampur;32-0	p.	sl(pr).
Velachha; 3–0	Velachha; 3–0	Kosamba; 4–0	w.,p.	sl (lokshala) tl.
Vapi; 9–0	Chhibhad kachh; 2–0 Sun.	Lawachha; 4–0	w.,rv.	sl(pr).; pyt.; tl,; dh.
Pardi; 22–0	Nani Vahiyal; 2–0 Thu.	Dharampur; 9–0	p.	pyt.
Anaval; 4–0	Local; Mon	Local;	w	sl(pr).; pyt.; tl.; ch.
Udwada; 0–6	Local; Tue.	Local;	w.,t.	sl(pr).
Bardoli; 12–0	Mahuwa; 3–0 Mon.	Mahuwa; 3–0	w.,rv.	sl(pr).; pyt.; cs.(fmg).; tl.
Kim; 1–4	Kim; 1–4	Local;	w.	sl(pr).; pyt.; 2cs. (c.,s.).; 2tl.; dg.
Bulsar; 6–0	Bulsar 6–0	Local;	w.	sl(pr).; tl.; ch.
Navsari; 7–0	Navsari; 6–0 Sun.	Local;	w.	sl(pr).; pyt.; cs.(mis.).; 2tl.; dh.; ch.; lib.; 3dp.
Kim; 12–0	Bodhan; 3–0 Mon.	Usked; 1–4	w.,rv.	mq.
Bulsar; 38–4	Rajpuri Jungle6–4 Thu.	Dharampur;20-4	rv.,p.	sl (lokshala).
Vyara; 2–0	Vyara; 2–0 Sat.	Vyara; 1–0	w.,rv.	sl (lokshala).; pyt.
Bilimora; 3–4	Bilimora 3–4	Local;	w.,t.	sl(pr).; pyt.; cs. (fmg.).; lib.
Bulsar; 18–0	Khergam; 2–0	Khergam; 2–0	w.	sl(pr).; pyt.; fr (Mg. Vad 13).; tl.; dh.
Maroli; 2–0	Maroli. 2–0	Local;	w.	sl(pr).; pyt.; 4tl.; mq.; dg.; dh.; lib.
....	....	deserted	....	....
Navsari; 12–0	Navsari; 11–0 Sun.	Satem; 0–3	w.	sl(2pr).; pyt.; mq.; ch.; dp.
Bulsar; 20–0	Khergam; 3–0	Khergam; 3–0	w.	
Bulsar; 38–0	Bopi; 5–0 Fri.	Dharampur 21-0	o.	hardship of water-supply.
....	....	deserted	....	....
Bulsar; 40–0	Rakholi; 8–0 Fri.	Rakholi; 7–0	rv.,p.	sl(pr); tl.
Sayan; 14–0	Surat; 16–0 Sat.	Sondal; Khara. 1–0	w.	sl(pr).; tl.; dh.
Bardoli; 7–0	Surat; 10–0 Sat.	Bardoli; 7–0	w.	sl(pr).; pyt.; tl,; lib.; dp.
Bardoli; 12–0	Karchelia; 1–0 Tue.	Local;	w.,t.	4sl(4pr).; pyt.; 3cs. (3mp.),; fr (Phg. Sunday preceding Holi).; 4lib.

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1228	Nali-Madhaṇī DRP.; નલીમધણી...	W; 10–0	1.4; 333; 48; 333	Dharampur; 10-
1229	Nalon VLD.; નલોણ	S; 4–0	0.3; ....deserted ...	....
1230	Nāloṭhā VLD.; નાલોઠા	NE; 1–2	1.3; 416; 69; 416	Valod; 2-
1231	Nāmadhā PRD.; નામધા	S; 12–0	0.8; 658; 116; 486	Vapi; 1-
1232	Nānā-Bandhārapāḍā SGD.; નાનાબંધારપાડા	S; 6–0	0.8; 174; 31; 156	Songadh; 6-
1233	Nānā-Borasarā MGL.; નાના બોરસરા	W; 21–0	1.9; 247; 49; 171	Panoli; 0-
1234	Nanakawāḍā BLR.; નનકવાડા	SW; 2–0	1.1; 1473; 276; 569	Mograwadi; 1-
1235	Nānā-Poṇḍhā DRP.;નાનાપોંઢા	S; 10–0	2.3; 920; 145; 920	Dharampur; 10-
1236	Nanasāḍ KMJ.; નનસાડ	SE; 2–0	1.0; 551; 93; 518	Kamrej; 2-
1237	Nanasāḍ VLD.; નનસાડ	N; 2–0	1.1; 231; 50; 231	Valod; 2-
1238	Nānāsataśīlā VRA.નાનાસતશીલા	SE; 17–0	0.5; 59; 10; 59	Vyara; 17-
1239	Nānāsut-Khaḍakā MGL.; નાનાસુતખડકા	E; 46–0	1.4; 198; 33; 194	Umerpada; 12-
1240	Nānā-Tāḍapāḍā SGD.; નાના તાડપાડા	S; 23–0	2.6; 90; 15; 90	Songadh; 23-
1241	Nānāvarāchā CRS.; નાના વરાછા	E; 5–4	1.3; 1460; 288; 798	Local
1242	Nānā-Wāghachīpā PRD.; નાના વાઘછીપા	E; 6–4	1.3; 804; 141; 791	Mota Vagh-chhipa; 1-0
1243	Nāndagām DRP.; નાંદગામ	E; 20–0	4.8; 101; 25; 101	Dharampur; 20-0
1244	Nandapor MDV.: નંદપોર	W; 6–0	2.8; 420; 75; 400	Mandvi; 6-0
1245	Nandāv MGL.; નંદાવ	SW; 10-0	2.2; 415; 93; 405	Kosamba, 4-0
1246	Nandāwalā BLR.; નંદાવલા	E; 3–2	0.8; 209; 47; 138	Bulsar; 3-0
1247	Nadodā BRD.; નાદોડા	W; 1–4	2.6; 303; 68; 264	Bardoli; 2-0
1248	Nāndolā MGL.; નાંદોલા	NE; 7–0	1.4; 367; 47; 363	Wankal; 1-0
1249	Nānī-Bhamatī BNS.; નાનીભમતી..	N; 3–0	0.8; 311; 65; 178	Bansda; 3-0
1150	Nānī-Bhaṭalāv BRD.; નાનીભટલાવ	E; 10–0	0.7; 463; 89; 451	Madhi; 1-4
1241	Nānī-Bhūravāṇ SGD.; નાની ભૂરવાણ	S; 5–0	0.4; 12; 2; 12	Songadh; 5-0
1252	Nānīcer MDV.; નાનીચેર	S; 6–0	2.3; 795; 132; 719	Tarsada Bargama; 5-0
1253	Nānī-Ḍhol-Duṅgarī DRP.; નાની ઢોલડુંગરી	NE; 2–4	1.8; 725; 108; 725	Dharampur; 3-0
1254	Nānī-Faḷīā MGL.; નાની ફળીઆ	NE; 5–0	1.1; 254; 41; 243	Wankal; 1-

Railway St.; Distance. 5		Weekly Bazar; Distance; Bazar Day. 6			Motor Stand; Distance. 7		Drinking water facilities 8	Institutions and other information. 9
Pardi	20-0	Nani Vahiyal	2-0	Thu.	Nana Pondha.	5-0	rv.	sl(m).
					deserted			
Madhi;	10-0	Valod;	2-0;	Fri.	Valod;	1-0	w. rv.	
Vapi;	1-4	Vapi;	1-4;		Vapi;	1-4	w.	s, (pr).; t.
Songadh;	6-0	Songadh;	6-0;	Sun.	Songadh;	6-0	rv., w.	
Pano i;	0-6	Panoli;	0-6		Panoli;	0-6	w.,p.	tl.
Bulsar;	1-0	Bulsar;	1-0;		Bulsar;	2-0	t., w.	sl (pr).; pyt.;
Pardi;	15-0	Mandava;	5-0;	Fri.	Local;		w., p, rv.	sl (pr).; cs. (fmg.); tl.
Chalthan;	9-0	Surt;	10-0;	Sat.	Kamrej	2-0	w.	sl (pr).; pyt.; cs. (c.); tl,; lib, dp.
Madhi;	10-0	Valod;	2-0;	Fri.	Volod;	2 9	w.	cs. (lif.); 2tl.
Vyara;	17-0	Balpur;	7-0;	Mon.	Vyara;	17-0	w., rv.	pyt.
Umerpada;	12-0	Umerpada;	12-0;				w.	pyt.; cs.
Songadh;	23-0	Songadh;	23-0;	Sun.	Songadh;	23-0	rv.	
Susat;	3-0	Susat;	3-0;	Sat.	Local;		w., rv.	sl (pr).; pyt.; fr (Ct. sud 15).; 7tl,; mq.; dg.; ch.; 2dp.
Pardi;	8-0	Pardi;	8-0;		Panchlai;	1-0	w.	Sl (pr).; pyt.
Bulsar;	38-0	Mandava;	7-0;	Fri.	Dharampur;	20-0	p.	
Madhi;	13-0	Amba;	3-0;	Sat.	Bori;	1-0	w., rv.	sl (lokshala).; cs.; dg.; ch.
Kosamba;	4-0	Velachha;	3-0;		Kosamba;	4-0	w., pf.	sl (pr).; pyt.; tl.; ch.; dp.
Bulsar;	3-0	Bulsar;	3-0;		Bulsar;	3-0	w.	
Bardoli;	2-0	—			Local;		w.	pyt.; tl.
Wankal;	1-0	Wankal;	1-0;	Fri.	Mangrol;	7-0	w.	sl (lokshala).; pyt.;tl.
Unai;	4-0	Bansda;	3-0;	Fri.	Local,		w., rv.	
Madhi;	1-4	Surali;	2-0;	Thu.	Madhi;	1-4	w. rv.,	sl (pr.). cs.;
Songadh;	5-0	Songadh;	5-0;	Sun.	Songadh;	5-0	rv., w.	
Madhi;	14-0	Mandvi;	6-0;	Wed.	Local;		w., rv. P.	sl (pr).; cs.
Bulsar;	21-0	Dharampur;	3-0;	Mon.	Dharampur;	2-4	w., rv.	sl (pr).
Wankal;	1-0	Wankal;	1-0;	Fri.	Mangrol;	5-0	w., n.	

Sr. No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati. 1	Direction; Travelling distance. from taluka peta H.Q. 2	Area (sq. miles.); Population; Households; Agricultural population. 3	Post office; Distance, in miles 4
1255	Nānī-Kheravāṇ SGD.; નાની ખેરવાણ	N; 5-4	1.2; 278; 44; 276	Songadh; [illegible]
1256	Nānī-Koraval DRP.; નાની કોરવલ	E; 25-0	2.7; 251; 49; 251	Dharampur; 2
1257	Nānī-Kosabāḍī DRP.; નાની કોસબાડી	E; 19-0	1.6; 81; 16; 81	Dharampur; 1
1258	Nānī-Naroli MGL.; નાની નરોલી	S; 7-0	6.9; 2594; 478; 2055	Local;
1259	Nānī-Palasaṇ DRP.; નાની પલસાણ	S; 45-0	2.1; 306; 43; 306	Dharampur; 45
1260	Nānī-Pāraḍī MGL.; નાની પારડી	N; 2-4	2.0; 430; 90; 430	Mangrol; 2-4
1261	Nānī-Taṁbāḍī PRD.; નાની તંબાડી	S; 20-0	1.6; 1097; 144; 1085	Lawachha; 3-C
1262	Nānī-Vahiyāḷ DRP. નાની વહિયાળ	N; 6-0	2.7; 1509; 251; 1509	Dharampur; 6-0
1263	Nānī-Vālajhar BNS.; નાની વાલઝર	N; 4-0	0.8; 245; 58; 235	Bansda; 4-0
1264	Naraḍā MHW.; નરડા	W; 4-0	0.8; 185; 25; 185	Mahuwa; 4-0
1265	Nāraṇapor CKL.; નારણપોર	SE; 12-0	1.0; 775; 123; 771	Khergam; 2-0
1266	Narathāṇ OPD.; નરથાણ	SW; 5-0	2.2; 516; 115; 461	Dihen; 1-0
1267	Nārawaḍ DRP.; નારવડ	SE; 30-0	0.8; 300; 48; 300	Dharampur; 30-0
1268	Nareṇ MDV.; નરેણ	SW; 11-0	3.6; 616; 112; 616	Bodhan; 6-0
1269	Nasārapur MGL.; નસારપુર	NE; 16-0	6.0; 869; 156; 867	Zankhvav; 5-0
1270	Nasilapor NVR.; નસીલપોર	E; 4-4	0.5; 414; 94; 395	Kaliawadi; 2-0
1271	Nasurā BRD.; નસુરા	W; 12-6	1.4; 378; 66; 343	Kadod; 2-0
1272	Naugāmā MDV. નૌગામા	W; 14-0	5.1; 1567; 307; 1526	Bodhan; 3-0
1273	Navācakarā MGH.; નવાચકરા	, 38-0	1.7; 242; 31; 222	Umerpada; 13-0
1274	Navāgām CRS.; નવાગામ	E; 1-6	0.6; 4760; 1030; 87	Local;
1275	Navāgām KMJ.; નવાગામ	W; 2-0	1.4; 536; 125; 488	Kholawad; 1-0
1276	Navāparā NVR.; નવાપરા	E; 12-4	0.6; 75; 14; 75	Ugat; 1-4
1277	Navānagar BNS.; નવાનગર	S; 2-4	1.8; 474; 107; 437	Bansda; 3-0
1278	Navasārī NVR.; નવસારી	Head-quarters	1.4; 65694; 8893; 1600	Local;
1279	Navatāḍ BNS.; નવતાડ	E; 5-0	1.9; 348; 71; 341	Bansda; 5-0
1280	Naverā BIR.; નવેરા	E; 10-2	3.0; 1131; 200; 1101	Ronvel; 1-0

Railway St.; Distance.	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance.	Drinking water facilities	Institutions and other information.
5	6	7	8	9
Songadh; 5–4	Songadh; 5–4; Sun.	Songadh; 5–4	w.	s (pr).; pyt.
Bulsar; 43–0	Nani Vahiyal; 10–0; Thu.	Dharampur;25–0	p.	
Bulsar; 37–0	Ukta; 12–0; Sun.	Dharampur;19–0	rv.	
Mangrol; 7–0	Surat; 16–0; Sat.	Local;	w., p.	2sl (2pr).; pyt.; 2cs. tl.; mq.; 3dg.; ch.;; lib.
Bulsar; 63–0	Varwath; 8–0; Sun.	Dharampur;45–0	rv., p.	
Mangrol; 2–4	Mangrol; 2–4;	Mangrol; 2–4	w.,n.	
Vapi; 8–0	Chhibhadkachh; 3–0; Sun.	Lawachha; 2–0	w.	sl (pr).; pyt.
Bulsar; 24–0	Local; Thu.	Dharampur; 6–0	w., rv.	sl (m).; pyt.; tl.; dg.
Unai; 5–0	Moti Valzar; 0–4; Mon.	Bhinar; 1–0	w., rv.	2sl (pr., lokshala).
Bardoli; 9–0	Dholikui; 0–2; Sun.	Dholikui; 0–2	w.	pyt.
Bulsar 14–0	Khergam; 2–0;	Khergam; 2–0	w., rv.	sl (pr).; mq,; dg.
Surat; 11–0	Surat; 11–0; Sat.	Local;	w., p.	sl (pr).; pyt.; 3tl.; ch.; lib.
Bulsar; 48–0	Huda; 5–0; Tue.	Dharampur;30–0	p.	
Kim; 21–0	Amba; 3–0; Sat.	Zab; 1–0	w.	sl (pr).; pyt.
Zankhavav; 5–0	Zankhavav; 5–0;	Zankhavav; 5–0	w.	sl (pr).
Navsari; 4–0	Navsari; 4–0; Sun.	Local;	w.	mq.; 2dg.; lib.
Madhi; 4–4	Surali; 2–0; Thu.	Kodod; 1–4	w.	
Kim; 15–0	Bodhan; 3–0; Mon.	Local;	w.	sl (m).; pyt.; dg.; dh.; ch.
Umerpada; 13–0	Umerpada; 13–0;		w.	sl (pr).; cs.
Surat; 1–4	Surat; 1–4; Sat;	Local;	p.	sl (pr).; pyt.; cs.; 3tl.; M.; 2dg.; dh.; dp.
Surat; 8–0	Surat; 8–0; Sat.	Local;	w.	sl (pr).; pyt.; 2tl.; ch.
Navsari; 11–4	Dholikui; 2–0; Sun.	Ugat; 1–6	w.	
Unai; 10–0	Bansda; 3–0; Fri.	Bansda; 2–4	w., rv., str.	2sl. (pr., lokshala). tl.
Local;	Local;	Local;	p.	21sl (11pr., 2m., 8h).; 5cs. (5c.); fr (As Sud 8 and 10) Ashapuri Goddess.; 16tl.; M.; 6mq.; 11dg.; 2dh.; adg.; ch.; 12lib.; 27dp.
Kevdi Road; 3–0	Khambla; 1–4; Tue.	Bansda; 5–0	w.,rv.	sl (pr).; cs. (mp).
Bulsar; 14–0	Local; Sun.	Bhoma Pardi 1–4	w., rv.	sl (pr).; pyt.; fr (An. Sud 8).; 2tl.

Sr. No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati. 1	Direction; Travelling distance from Taluka Peta H. Q. 2	Area (Sq. Miles.); Population; Households; Agricultural Population. 3	Post office; Distance. 4
1281	Neś OPD., નેશ	E; 7-0	1.7; 414; 79; 374	Olpad.; 7-0
1282	Netraṅg KMJ. નેત્રંગ	E; 5-0	1.4; 397; 84; 335	Kamrej; 5-0
1283	Nihāḷī MHW., નિહાળી	S; 5-0	1.6; 412; 66; 407	Ukta; 2-0
1284	Niḷosī DRP., નિળોસી	S; 30-0	2.8; 364; 71; 364	Dharampur; 30-0
1285	Nīmakhal PRD., નીમખલ	E; 7-0	1.1; 312; 61; 282	Mota Vaghchhipa; 0-4
1286	Nimarāi NVR., નિમરાઈ	W; 15-0	2.9; 493; 116; 459	Mangrol; 2-0
1287	Nīṇat BRD., નીણત	SW; 6-0	1.6; 461; 89; 453	Sarbhan; 1-0
1288	Nīndawāḍā SGD., નીંદવાડા	N, 10-0	0.6; 294; 38; 268	Songadh; 10-0
1289	Nīorī PRD., નીઓરી	E; 10-0	1 4; 714; 138; 703	Mota Vaghchhipa; 3-0
1290	Nirapaṇ BNS.; નિરપણ	S. 12-0	1 6; 299. 68; 298	Bansda; 12 0
1291	Nīrawaḷ DRP.; નીરવલ	S; 51-0	0 8; 28. 5; 28	Dharampur; 51 0
1292	Niśāṇā SGD.; નિશાણા	NW; 8-0	0 4; 538; 100. 538	Songadh, 8 0
1293	Nīyol PLN.; નીયોલ	SW; 7 0	2 0; 756, 165; 578	Local;
1294	Nizar BRD.; નિઝર	S, 4 4	0 8, 966 195, 915	Local.
1295	Nogāmā BRD.; નોગામા	W; 9 4	0 6. 246, 53; 242	Sarban; 3 0
1296	Nogāmā CKL.; નોગામા	N; 10 0	3 2, 2016; 433; 1912	Local;
1297	Nogāmā MGL.; નોગામા	W; 6 0	1 6; 421; 80; 414	Simodra; 2 0
1298	Obhalā OPD.; ઓભલા	E; 8 0	1 5: 174; 41; 157	Dihen; 2-0
1299	Ogaṇīsā MGL.; ઓગણીસા	E: 8 0	2 4; 439, 67; 403	Wankal; 3 0
1300	Okhā CRS.; ઓખા	6 0	1.1; I I I	Rānder; 2 0
1301	Olagām BLR.; ઓલગામ	NE; 10 0	3 5, 484; 100; 484	Udach, 3 0
1302	Olapād OPD.; ઓલપાડ	Head-quarters	5 8; 3769; 864; 1440	Local;
1203	Oṇacī NVR.; ઓણચી	E, 5-4	0.7; 489; 113, 435	Sisodra; 3 4
1204	Oṇdac MHW.; ઓંડચ	W, 0 4	1.7; 481, 91; 443	Mahuwa; 0 4
1205	Oñjal NVR.; ઓંજલ	W; 14-0	4.2; 3331. 754; 837	Local;
1206	Oragām BRD.; ઓરગામ	NE; 7-0	1.7; 803; 170; 731	Akoti; 1-0
1207	Oramā OPD.; ઓરમા	W; 2 0	1.4; 424: 93; 414	Olpad; 2-0
1208	Oraṇā KMJ.; ઓરણા	E; 7-0	2.6; 1459, 272; 1122	Local;
1209	Orawāḍ PRD.; ઓરવાડ	S; 4-2	0.9; 1172; 245; 165	Rantlaw; 1-
1310	Oṭā STD.; ઓટા	S; 38-0	2.0; 135; 26; 125	Navapur; 18-
1311	Oṭā-Ṭokarvā SGD.; ઓટા-ટોકરવા	S; 4-4	0.2; 21; 3; 21	Songadh; 4-

Railway St.; Distance.	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance.	Drinking water facilities	Institutions and other information.
5	6	7	8	9
Sayan; 16-0	Surat; 20-0; Sat.	Kamrej; 0-4	w.	pyt.; cs.; tl.
Bardoli 10-0	Bardoli; 10-0; Sat.	Local;	w.	sl (pr).; pyt.; tl.;ch. Motor-stand seasonal available only during Summer and Winter.
Navsari; 12-0	Ukta; 2-0; Sun.	Local;	w.	sl (pr).
Bulsar; 48-0	Varvath; 2-0; Sun	Dharampur;30-0	p.	
Pardi; 9-0	Pardi; 9-0;	Panchlai; 0-4	w.	
Maroli; 7-0	Maroli; 7-0;	Local;	w.	sl (pr).; dh.; lib.
Bardoli 7-0		Sarbhan; 1-0	w., rv.	sl (pr.; tl.; dg
Songadh; 10-0	Songadh; 10-0, Sun	Songadh, 10 0	rv	sl (pr).; pyt.
Pardi. 11-0	Lakhamapore;1-0, Sat.	Local;	w	2l (pr) lokshala).
Unai. 19 0	Chorwani; 2 0, Thu.	Bansda. 12 0	w.,str.	
Bulsar. 69-0	Ozar. 3-0.	Dharampur.51-0	rv., n.	
Songadh. 8-0	Songadh; 8 0; Sun	Songadh 8 0	w	pyt.
Local	Surat. 5 0; Sat	Antroli, 1 0	w.	sl(pr) : pyt : tl : dh.; ch.; lib.; dp.
Bardoli. 6-0	Mahuwa; 4-0; Mon	Goji; 1 4	w	sl(pr).. pyt.; tl ; ch.
Bardoli; 9 0	-	Local;	w.	
Rankuva 4 0	Gandevi; 2 0, Wed	Tankal 1-0	w.	sl(pr). , pyt., fr(An. Sud 14).; tl.; mq.; dp.
Sumsura. 2 0	Surat. 18 0, Sat	Ladkeshwar, 3 0	w., n.	4l (lokshala).; pyt.; 2dg.
Surat. 9 0	Surat. 9-0 Sat	Diber. 2 0	w	cs. (c.); tl ; dg.; ch.
Wankal. 3 0	Wankal. 3 0. Fri	Mangrol 8-0		
Surat. 6 0	Surat. 4 0. Sat.	Rander; 2 0		
Dungri. 3-0	Dungri; 2 0.	Dungri 3 0	w.	sl(lokshala).. tl.
Sayan. 9-0	Surat; 12-0. Sat..	Local;	w. p.	3sl (2pr . h) ; pyt.; cs.; 14tl , 4 mq.; 6dg.; 5 dh ; ch.; lib,; 5dp.
Navsari. 5 0	Navsari. 4-0, Sun.	Bhatai. 0 4	w..	
Bardoli 10 0	Mahuwa; 0-4, Mon	Mahuwa. 0 4	w	sl(pr).; pyt.; ch.; lib.
Vedchha. 7-0	Abrama. 6 0;	Ati; 0-4	w..p.	3sl(2m)., pyt.; 2tl.; dp.
Madhi. 2 4	Surali; 3-0;	Kadod-Madhi 0-6	w., rv.	sl(pr). . dg
Sayan 9-0	Surat; 11 0; Sat.	Olpad. 2 0	w.	sl(pr).; tl.; mq.. dg.
Bardoli. 9 0	Bardoli; 9 0; Sat.	Local.	w	2sl(prh).; pyt., 3tl ;3dg. ch.; lib.; 2dp.
Rantlaw. 1 0	Motiwada; 1 4; Tue.	Local;	w. t	sl(pr).. pyt.; tl.; dp.;
Navapur; 18-0	Varna; 10-0; Wed.	Local	rv.. w.	sl(pr).; pyt.; ch.
Songadh 4-4	Songadh; 4 4; Sun.	Songadh; 4-4	rv.,w.	

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1312	Ovāḍā BLr.; ઓવાડા	E; 5-0	2 2; 842; 176; 628	Ghadoi; 1-(
1313	Oviāṇ KMJ.; ઓવીઆણ	W; 9-0	1.4; 274; 46; 329	Kosmadi; 1-(
1314	Ozar BLR.; ઓઝર	E, [illegible]	[illegible] 1071; 169; 1031	Ronvel; 3-(
1315	Ozar DRP.; ઓઝર	S; 18-0	3.3; 706; 124; 706	Mota Pondha; 2 (
1316	Ozar SGD.; ઓઝર	S; 18-0	2.5; 125; 25; 125	Songadh; 18-(
1317	Ozaraḍā DRP.; ઓઝરડા	S; 13-0	4.7; 784; 160; 752	Dharampur; 13 (
1318	Pāḍā MGL.; પાડા	E; 13 0	1.1; 141; 30; 141	Wankal; 9 (
1319	Paḍaghā NVR.; પડઘા	NE; 4 0	2 0; 1118; 225; 777	Amli; 1-0
1320	Padamaḍuṅgari VRA.; પદમડુંગરી	S; 22-0	5.3; 711; 128; 711	Unai; 6-0
1321	Pahāḍada SGD.; [illegible]	SE,	1 4; 136; 28; 134	Navapur; 20-0
1322	Paikheḍ DRP.; પૈખડ	E; 22 0	1.1; 162; 30, 111	Dharampur; 22-0
1323	Pāl CRS.; પાલ	W; 4-4	2.1; 1544; 318; 748	Local;
1324	Pālagabhan BNS; [illegible]	N, 5-0	1 9; 1008; 173; 958	Unai, 2-
1324	Pālaṇ BLR., [illegible]	E, 5 6	1 9; 656, 119; 654	Ghadoi; 2-
1325	Pālaṇapor CRS, પાલણપોર	NW; 4 0	1 5, 397; 69, 366	Pal; 0-
1327	Palasāṇa PLN, [illegible]	Head-quarters	2.1; 2984, 637, 1680	Local,
1328	Palasāṇā PRA.; પલસાણા	W; 4-0	2 6, 1717; 361; 1571	Local;
1329	Palāsiā VRA.; [illegible]	SE, 16 0	1 0; 458, 71; 457	Bohari, 5-
1330	Palasod BRA.; [illegible]	N, 6 4	1 6; 988, 192; 873	Akoti; 1-
1331	Pālāvāḍī VRA; [illegible]	SE; 17-0	1 0, 211, 38, 210	Buhari, 4-
1332	[illegible] CRS.; [illegible]	S; 10 0	0 6, 201; 34; 201	Sachin; 2-
1333	[illegible]lī KMJ.; [illegible]	S, 8-0	1 7; 461; 88, 429	Haldharu, 1-
1334	Pālod MGL.; પાલોદ	SW; 14-0	1.2; 206, 41; 160	Kim; 2-
1337	Paṇadā BRD.; પણદા	N; 4-0	0.8, 306; 65, 291	Local;
1336	Paṇaj CKL.; પણજ	S; 9-0	1.1; 498; 66, 484	Khergam;
1335	Panār NVR., પનાર	SW; 13-0	2 3; 1284; 281, 502	Local;
1338	Panās CRS.; પનાસ	W; 2-0	0.3; 18, 4; 14	Athwa;
1339	Pānas DRP.; પાનસ	S; 9-0	2-5; 582; 99; 582	Dharampur;
1340	Pānavāḍī VRA.; પાનવાડી	S; 2-0	0 8; 274; 63; 97	Vyara;

Railway St.; Distance.	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance.	Drinking water facilities	Institutions and other information.
5	6	7	8	9
Bulsar; 5–0	Bulsar; 5 0:	Local;	w.,t.	sl(pr).; 2cs. (2c).
Surat, 8–0	Surat; 8 0; Sat.	Antroli; 1–4	w.	pyt.
Bulsar; 23–0	Navera; 2–0; Sun.	Dadivalli, 2–4	w.,rv.	sl(pr).; lib.
Vapi; 11-0	Local;	Nana Pondha:9–0	w.,r.v	P. Sl(pr).; tl.
Songadh: 18-0	Songadh; 18-0; Sun.	Songadh, 18 0	rv.	sl(lokshala).
Bulsar, 31–0	Mandava; 2-0; Fri.	Nana Pndha 6-0 (Chiwal)	p., rv.	sl(pr).
Zankhvav: 3 0	Zankhvav; 3-0,	Zankhvav. 3-0	w.,n.	
Navsari 5-0	Navsari. 3 0 Sun.	Kashapar; 1 0	w.	sl(pr).; pyt.; 3tl.; lib.
KevdiRoad.2 0	Bansda: 3 0 Fri	Unai 6-0	w	sl (lokshala).; pyt.
Navsari, 20 0	Singana 7 0 Tue	Virathva, 5 0	w.,rv.	pyt.
Bulsar, 40 0	Ukai 10 0 Sat	Dharampur 22 0	p rv.	pyt
Surat, 3–0	Surat, 5 0 Sat	Local	w.	sl (pr),. pyt ; 2cs. (mis. Milk Sale),: 4tl : mq.: dg ; dh , lib ; dp.
Unai 2 0	Unai, 2-0 Tue	Bisnar, 2 0	w rv	sl (pr),. pyt ; ch
Bulsar 5-0	Bulsar, 5 0	Oswada 1-0	w.,t.	sl (pr)., tl , dg.
Surat 4 0	Surat 5 0 Sat.	Ramnagar 1-0	w.	sl (pr),. 2cs (ccs :) tl.
[illegible] 5 0	Local:	Local	w	4Sl (2pr, m, h) . pyt.; cs : (c) : 9tl.; dg: 2dh : gym.: ch.: lib.: 4dp.
[illegible] 2 0	Motiwada, 1 4 Tue.	Udwada. 2 0	w	sl (pr).. pyt., fr (Mgh. Vad 13) : tl. dp ; lib.
Unai 10 0	Panchol 1 4 Fri	Bhojpurdoor.3-0	w.,rv	sl (pr).: cs : (mp).
[illegible] 1 4	Kodad. 4 0 Sun	Rayani 1-4	w	sl(pr).. pyt : ch.: lib.: dp
Unai 7 0	Balpur 2 4 Mon	Gadat. 5 0	w.,rv.	pyt , cs.
Sachin, 1 0	Surat. 4 4 Sat	Sachin 3 0	w.	3tl
[illegible] 4 0	Bardoli. 9 0 Sat	Segawa 2 0	w	sl (pr) : pyt.: cs.: (c).: tl.
[illegible] [illegible]	Kim: 2 0	Local.	w.,p	cs. mq . dg.
[illegible] 2 0	Kadod. 5 0 Sun	Local.	w.	sl (pr).: tl.
[illegible] 17 0	Khergam: 2-4	Khergam 2 4	w.	sl (pr).. tl.
[illegible] 4 0	Abrama: 4 0	Local.	w.	sl (pr).: pyt.: tl.: dg.: ch.: 3dp.
[illegible] 3 0	Surat. 2 0 Sat.	Athwa 1-0	w.	
[illegible] 27 0	Mandava. 5 0 Fri.	NanaPondha:2-0	w.,rv.	p. Sl (pr).; ch.
[illegible] 2 0	Vyara: 2 0 Sat.	Vyara 0-4	w.	pyt: cs; (mp); 2tl; (Kalikamata &Mahadev)

Sr. No,	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati. 1	Direction; Travelling distance. from Taluka Peta H. Q. 2	Area (sq. miles.); Population.; Households; Agricultural Population. 3	Post office; Distance in miles. 4
1341	Pānawā DRP.; પાનવા	E; 7-0	3.4; 370; 62; 370	Dharmpur; 7-0
1342	Pāncaāmbā MGL.; પાચઆંબા	E; 35-0	0.7; 227; 42; 215	Umerpada; 6-0
1343	Pancalāī BLR.; પંચલાઈ	NW; 9-4	1.0; 143; 35; 143	Gorgam; 0-2
1344	Pancalāī PRD.; પચલાઈ	E; 9-0	1.8; 1534; 293; 1398	Mota Vaghchhipa, 2-0
1345	Pāncapīpalā SGD.; પાંચપીપળા	NW; 12-0	1 3; 511; 84; 464	Songadh; 12-0
1346	Pāncaverā DRP.; પાંચવેરા	SE; 32-0	0.3; 100; 21; 100	Pendha; 12-0
1347	Pancol VRA.; પંચોલ	SE; 17-0	2 0; 721; 115; 697	Dolvan; 2-0
1348	Pāndavakhadak DRP.; પાંડવખડક	E: 10-0	3.1; 330; 67; 330	Dharampur; 10-0
1349	Pāndēsarā CRS.; પાંડેસરા	S; 4-0	1.1; 161; 34; 128	Udhna; 1-0
1350	Pandor PRD.; પંડોર	S: 20-0	1 6; 889; 172; 777	Koparli; 1-0
1351	Pānethā MGL.. પાણેથા	SW; 12-0	2.1; 280; 60; 159	Velachha 1-4
1352	Pangārabārī DRP.; પંગારબારી	E! 15-0	3.4; 395; 85; 395	Dharampur; 15-0
1353	Pāṇikhaḍak CKL.; પાણીખડક	SE: 14-0	2.1; 842; 177; 842	Rumola; 2-0
1354	Paniyārī VRA.; પનીયારી	W; 2-0	1.5; 530, 87; 483	Vyara; 2-0
1355	Parab KMJ.: પરબ	NE; 7-0	2.0; 837; 134; 707	Haldharu; 1-0
1356	Pāraḍi KMJ.; પારડી	NE: 3-0	3.9; 1125; 225; 1071	Local;
1357	Pāraḍī PRD.: પારડી	Head-quarters	5.1; 9422; 1704; 1450	Local;
1358	Pāraḍī MDV.; પારડી	NW: 6-4	1.7; 599; 102; 597	Godsamba; 1-
1359	Pāraḍī NVR.; પારડી	SE; 8-4	1.2; 1210; 240; 943	Local;
1360	Pāraḍī (Ārak) NVR.; પારડી(આરક)	N; 9-4	0.6; 268; 46; 245	Sisodra; 0-
1361	Pāraḍī (Bhādolī) OPD.; પારડી (ભાદોલી)	NE; 8-0	1.9; 428; 80; 418	Anita; 2-
1362	Pāraḍī-Hariā BLR.; પારડી હરીઆ	S; 7-0	0.2; 63; 15; 63	Haria; 0-
1363	Pāraḍī-Kaḍod BRD.; પારડી કડોદ	N; 6-5	0.8; 711; 141; 597	Local;
1364	Pāraḍī-Kaṇade CRS.; પારડી કણદે	S; 9-0	0.5; 187; 42; 134	Sachin; 2
1365	Pāraḍī-Kobā OPD. પારડી કોબા	N; 5-6	0.8; 285; 48; 261	Olpad; 5

Railway St.; Distance.	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance.	Drinking water facilities	Institutions and other information.
5	6	7	8	9
Bulsar; 22-4	Ukta; 1-0 Sun.	Dharmpur; 8-0	rv.	sl (pr).
Umerpada; 6-0	Umerpada; 6-0		w.	cs.
Dungri; 4-0	Dungari; 4-0	Wadhal-dhara; 1-4	w.	
Pardi; 11-0	Pardi; 11-0	Local;	w.	sl (pr).; pyt.; cs(c).
Vyara; 12-0	Satkul; 3-0 Fri.	Songadh, 12-0	w.rv.;n	sl (pr).; pyt.;cs.
Bulsar; 64-0	Huda; 9-0 Tue.	Penth; 11-0	p.rv.	
Unai; 4-0	Local; Fri.	Pati; 2-0	w.	sl (pr) . pyt.: cs.
Bulsar; 37-0	Rajpuri Jungle, 2-0 Thu.	Dharampur;10-0	p.	
Udhana; 2-0	Surat; 3 0 Sat.	Udhna; 3-0	w.	tl.; dg.
Vapi; 6-0	Local; Wed.	Vapi; 6-0	w.,t.	sl (pr) ; pyt.
Velachha; 1-4	Velachha; 1-4	Molvan; 3-0	w.	tl. dg.
Bulsar; 33-0	Rajpuri Jungle, 5-0 Thu.	Dharampur;16-0	p.	sl (pr.)., tl.
Bulsar, 16-0	Khergma, 5-0	Khergam; 5-4	w.rv.	sl (pr) ; pyt.; cs(c).; fr. (Ps.-Maker Sankranti); fr (Ct. Sud 15).; tl.; lib.
Vyara, 2-0	Vyara, 2-0 Sat.	Local.	w.	sl (pr).; pyt.; cs unlimited).
Tatithiya; 2-0	Bardoli, 9-0 Sat	Ubhel; 3-0	w.	sl (pr).; pyt.; cs, (c)., tl.; dh.; lib.
Sayan, 4-0	Surat; 12-0 Sat.	Local;	w.rv.	sl (pr).; pyt.; 2cs.; (c)., mis, 2tl.; ch; lib
Local;	Local.	Local;	w.,t., rv.	3sl (pr.,m.,h).; pyt.; 2cs (2c).; fr(An. Sud 10).; 5tl.; 2mq.; dg.; 2dh.; gym.; ch.; lib.; 5dp. 1. Ruins of Peshwa Fort. 2. Swadhyay Ashram — Pandit Satvalcker.
Madhi; 14-0	Amba; 8-0 Sat.	Kasal. 2-0	w .n.	sl (lokshala).; cs.; tl.
Navsari; 10-0	Navsari; 10-0 Sun.	Local.	w.,p.	sl(pr).; pyt.
Maroli. 8-4	Maroli; 8-4	Sisodra; (Arak). 0-4	w.	tl.
Kim, 5-0	Surat; 15 0 Sat.	Bhadol, 3-0	w.	sl (lokshala).; tl.; dh.
Pardi; 2-0	Bulsar; 6-0	Pardi; 2-0	w.,t.	
Timberva, 2-0	Kadod; 5-0 Sun.	Khoj; 0-3	w.,p.	sl(m).; lib.
Sachin; 0-6	Surat; 6-0 Sat.	Local;	w.	3tl.
Kim; 11-0	Surat; 18-0 Sat.	Takarma; 2-4	w.	dh.

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1366	Pāradi-Pāranerā BLR.: પારડી પારનેરા	SE; 3–0	2 6; 1554; 303; 950	Local;
1367	Pāradi Pāta PLN., પારડી પાતા	SE; 4–0	0.5; 502; 96; 455	Veshma; 4-0
1368	Pāradi Rakeb CRS:. પારડી રકેબ	S; 14–0	0.4; 42; 10; 42	Sachin; 5-0
1379	Pāradi-Sāndhapor BLR., પારડી સાંધપોર	N; 0-2	0.7; 1170; 240; 30	Bulsar; 0-4
1370	Pāradi Vagha BRD., પારડી વાઘા.	S. 10-0	0.6; 409; 148; 298	Surban; 3-0
1371	Pāradi-Vālod BRD.: પારડી વાલોડ	SW: 5-0	0 8, 601, 118; 274	Vakaner; 1-0
1372	Pāradi-Zānkhari OPD., પારડી ઝાંખરી	W; 7 1	7.0; 425; 72, 4[illegible]	Olpad; 7-0
1373	Pāranerā BLR. પારનેરા	S; 5 0	3 0; 1703; 354, 1132	Local.
1374	Parasoli NVR . પરસોલી	W, 14 0	1 9 414; 93; 295	Marol; 7-0
1375	Paratāpor NVR., પરતાપોર	S; 4 0	0 7. 422; 102; 355	Italva, 1-0
1376	Parathān NVR . પરથાણ	N. 7 0	1 4, 550, 112; 484	Veshma, 1-4
1377	Paravat CRS., પરવટ	SE 4 1	0 8 563; 114, 121	Kumbharia, 1-4
1378	Paravat MDV., પરવટ	NW, 10 0	0 2, 300; 56; 296	Mandvi, 10-0
1379	**Parawāsā** PRD . પરવાસા	[illegible]	2 3; 1135; 197 1127	Mota Vaghchhipa; 3-0
1380	Paria OPD. પરીઆ	[illegible] 7 0	3.5; 1071; 189; 844	Local.
1381	Pariā PRD . પરીઆ	SE 4 0	5 8, 3042, 589; 2375	Local.
1382	Parūjan NVR.: પરુજણ	W. 10 4	0 1, 1023 212, 824	Local.
1383	Pasodarā KMJ., પાસોદરા	W, 3 4	1 3, 316, 49; 246	Kathora, 0-4
1384	Pātal MDV. પાતળ	W. 11 0	4 3, 1384. 245, 1370	Mandvi, 11-0
1385	Pātaladevi MGL., પાતળદેવી	NE, 8 0	1 7, 438, 65, 356	Wankal, 2-4
1387	Pātanā MDV., પાટણા	W, 13 0	1 1, 140, 32, 129	Bodhan, 3-0
1387	Pāṭāwādi MDV., પાટાવાડી	N, 10 0	0 4, ... deserted ...	-
1388	Pāthakavādī MDV., પાઠકવાડી	S. 20-0	2 0, 866 142, 866	Unai, [illegible]
1389	Pātharadā SGD.: પાથરડા	N 5-0	1.2; 369, 55, 335	Songadh, 5 0
1390	Pathārādiā BRD.: પથરાડીઆ	S; 4 6	0 9, 444, 72; 439	Nizar 0 2
1391	Pātharī B.LR., પાથરી	E, 5 0	1 2, 464; 99, 457	Ronvel, 4 0
1392	Pātharī GND.: પાથરી	N, 2 4	1.2; 358, 79, 353	Gandevi, 2 0
1393	Patharon MHW.; પથરોણ	NE, 3 4	0.9, 391; 68, 343	Vankaner; 1 0
1394	Pāṭi CKL.: પાટી	SE; 17-0	2.9; 1193; 183; 1182	Dharampur, 6 0

Railway St.; Distance.	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance.	Drinking water facilities	Institutions and other information.
5	6	7	8	9
Bulsar: 3-0	Bulsar; 5-0	Local;	w.	sl(pr).; pyt.; cs.(c).; 3tl; lib.
Bardoli; 9-0	Sarbhan: 4-0	Local:	w.	sl(pr).; 3tl.; lib.
Sachin: 5-0	Surat: 6-0 Sat.	Lajpore; 3-0	w.	dg.
Bulsar: 0-4	Bulsar: 0-4	Bulsar: 0-2	w	sl(pr).; dh.
Bardoli: 9-0		Local;	w.	dp.
Bardoli: 6-0		Local:	w.	sl(pr).
Sayan: 17-0	Surat: 21-0 Sat.			pyt.; cs.; tl.
Bulsar: 5-0	Bulsar. 5-0	Local:	w.	sl(pr).; pyt.; cs.(c).; fr (An. Sud 8).; 4tl.;3dg.; dh.; ch.
Maroli: 7-0	Maroli. 7-0	Local:	w.	tl.; ch.
Navsari 3-0	Navsari. 3-0 Sun.	Italva: 1-0	w.	sl(pr).; 3tl.; dp.
Navsari. 5-0	Navsari. 6-0 Sun.	Local	w.	sl(pr).; pyt.; tl.; dh.; ch.; lib.
Udhna 1-4	Surat: 5-0 Sat.	Local:	w	sl(pr).; tl.; ch.: lib.
Vankal: 4-0	Amba. 4-0 Sat	Godsamba. 7-0	w.	Unregistered cs.(Regama).
Pardi. 7-0	Lakhmapore. 5-0 Sat	Mota. Vaghchhipa 3-0	w.	sl(pr).: pyt.
Sayan. 2-0	Surat. 11-0 Sat	Local;	w	sl(m).; pyt.; cs.; 6tl.
Udwada 3-4	Udwada. 3-4 Tue.	Local.	w.,t.	sl(pr).; pyt.;cs.(mp).; tl.; ch., lib.; dp.
Maroli. 5-0	Maroli. 4-0	Karakhat. 0-4	w.	sl(pr).; pyt.; cs : 4tl.: dh.: ch.; lib.; dp.
[illegible]	[illegible] 5-0 [illegible]	[illegible] 1-4	w	sl(pr).: pyt.; lib.
Kim 21-0	Amba: 4-0 Sat	Zab 3-0	w.	sl(pr).: pyt.: cs : tl.: dg. ch.
Wankal. 2-4	Wankal. 2-4 [illegible]	[illegible] 8-0	w.	sl (lokshala).
Kim. 21-0	Bodhan 3-0 Mon	[illegible] 1-4	w., rv.	sl (lokshala) ; dg.
Unai 2-0	Unai: 2-0; Tue	Local	w., rv.	sl(Lokshala).: pyt. cs.:
Songadh: 5-0	Singpur: 3-0; Mon	Songadh. 5-0	w., rv.	pyt.
Bardoli 6-0	Mahuwa; 3-4; Mon	Sarbhan 2-0	w	pyt
Bulsar 6-0	Navera: 5-0, Mon	Local	w	sl(pr)., fr(An. Sud 8); ch.
Gandevi. 2-0,	Gandevi: 2-0; Wed.	(i) Gandevi 2-0 (ii) Dhanori. 1-0	w., [illegible]	sl(pr).. [illegible] dg.: lib.;
Bardoli. 5-0	Mahuwa; 4-0 Mon.	Mahuwa. 3-4	w.	sl(pr).: pyt. 2tl.; ch.
Bulsar; 24-0	Dharampur; 5-0;	Khergam: 7-0	w., rv.	sl(pr).: pyt.

Sr. No.	Village or Town name in English; Taluka abbreviation, Village or Town name in Gujarati. (1)	Direction; Travelling distance. from Taluka peta H.Q. (2)	Area (Sq. Miles.); Population Households; Agricultural Population. (3)	Post office; Distance. in miles (4)
1395	Pāṭi GND.; પાટી	W; 1-4	1.0; 716; 146; 474	Gandevi; 2 0
1396	Pāṭi PRD.; પાટી	E; 14-0	0.8; 417; 78; 413	Mota Vaghchhipa; 6-0
1397	Pāṭi VRA.; પાટી	SE; 16-0	4.3; 1981; 329; 1927	Dolvan; 1-0
1398	Pāṭi-Bandhārā SGD.; પાટી બંધારા	SE; 42 0	0.4; 84; 15; 70	Khandbara; 15 0
1396	Pāwaraṇ VLD.; પાવરણ	W; 2-4	1.4;	deserted ....
1400	Peḍachā DRP.; પેડછા	S; 40-0	1.4; 206; 49; 204	Dharampur; 40-0
1401	Pelāda-Buhāri VLD.; પેલાદ બુહારી	S; 7-4	0.5; 707; 148; 674	Buhari; 0 4
1402	Peṇadhā DRP.; પેણધા	E, 17-0	1.5; 196; 42; 196	Local;
1403	Peṇḍhāradēvi DRP.; પેંઢારદેવી	S; 27-4	2 7; 347; 65; 347	Dharampur; 27-4
1404	Perā NVR., પેરા	N, 9-0	2 2, 950, 173, 825	Veshma, 3 0
1405	Peravaḍ VRA.; પેરવડ	S, 8-0	1 0; 354; 60; 354	Vyara, 8 0
1406	Peṭarakui MDV.; પેટરકુઈ	N, 11 0	1 8; 78; 12; 78	Zankhvav; 5 0
1407	Pethāṇ NVR.; પેથાણ	W; 6 0	1 0, 1158; 265; 623	Local; [illegible]
1408	Pīcaravān MDV.; પીચરવાણ	N; 10-0	1 4. 73; 10; 73	Zankhvav; 8 0
1409	Pīnasāḍ NVR.; પીનસાડ	SE; 8-0	1 6; 674, 140; 424	Veshma; 5-0
1410	Pīnḍaval DRP.; પીંડવળ	E; 14-0	2 0; 415, 77; 415	Dharampur, 14-0
1411	Pīñjarā GND.; પીંજરા	N; 5-0	0.5; 315; 59; 305	Vegam; 0-4
1412	Pīñjarat OPD., પીંજરત	SW; 10-0	13 1. 2281, 554; 1874	Local;
1413	Pipaladharā GND.; પીપલધરા	NE; 4-0	1.6; 820; 163; 549	Endhal; 1-4
1414	Pipalagabhāṇ CKL., પીપલગભાણ	N; 5-0	3.3; 1887; 343; 1817	Local;
1415	Pīpalakheḍ BNS.; પીપલખેડ	SW; 9-0	2 6. 576; 131; 574	Bansda; 9-0
1416	Pīpaḷakuvā SGD., પીપળકુવા	S; 7-0	3 1. 774; 108; 714	Songadh; 7-0
1417	Pīpalapāḍā DRP.; પીપલપાડા	E; 23-0	2 1; 585, 136; 360	Dharampur, 23-0
1418	Pīpalaset DRP.; પીપલસેત	SE, 35-0	3 2; 431; 82; 431	Dharampur, 35-0
1419	Pīpalathā MDV.; પીપલથા	W; 14 3	1.1; ....deserted	....
1420	Pipaḷavāḍā VRA., પીપળવાડા	SE, 22-0	3.8; 350; 65; 297	Dolvan; 12-0
1421	Pīpaḷavāḍā MDV.; પીપળવાડા	E; 7-0	2.1; 310; 45; 258	Mandvi; 7-0
1422	Pīpalawān MDV.; પીપલવાણ	N; 17-0	1.2; 72; 11; 72	Zankhvav; 7-0
1423	Pīpalod CRS., પીપલોદ	W; 2-0	0.9; 418; 89; 282	Local;
1424	Pipariā BRD.; પીપરીઆ	E; 8-0	.........................deserted	....
1425	Pipariā MDV.; પીપરીઆ	E; 11-0	1.8; 272; 53; 253	Kadod; 4-
1420	Piparol DRP.; પીપરોલ	E; 11-0	4.5; 223; 41; 223	Dharampur; 11-
1427	Piparoṇī DRP.; પીપરોણી	S; 28-0	3.0; 429; 75; 429	Dharampur; 28-
1428	Piparoṭī DRP.; પીપરોટી	SE; 24-0	1.3; 122; 25; 122	Dharampur; 24-

Railway St.; Distance in miles	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance. in miles	Drinking water facilities	Institutions and other information.
5	6	7	8.	9
Gandevi; 2-0	Gandevi; 2-0; Wed.	Gandevi; 2-0	w., t.	sl(pr).; pyt.; dg.
Pardi; 12-0	Lakhampore;3-0; Sat.	Dhagatmal; 2-0	w., rv.	sl(pr).; pyt., dg.
Unai; 3-0	Panchol; 1-0; Fri.	Local;		sl(pr.); pyt.; 2cs.; fr (Kt. Sud 15).; ch.; lib.
Khandbara; 15-0	Khandbara 15-0; Sun,	Nandurbar; 24-0	w.	pyt.
		deserted		
Bulsar; 52-0	Rakholi; 4-0; Fri.	Rakholi; 4-0	w., p., rv.	
Madhi; 16-4	Buhari; 0 4; Wed.	Buhari; 0-4	w., rv.	sl(pr).; pyt.
Bulsar; 35-0	Ukta; 10 0, Sun.	Dharampur; 17-0	rv., p.	
Bulsar; 45-4	Sildha; 2-4; Sat.	Dharampur; 27-4	w.	sl(pr).
Navsari; 10-0	Navsari; 10-0, Sun.	Local;	w.	sl(pr.); pyt.; tl.; dg.; lib.; dp.
Vyara, 8-0	Balpur; 2-0; Mon.	Vyara; 8-0	w., rv.	pyt.; cs.(mp).
Zankhavav; 5 0	Devgadh; 3 0; Thu.	Devgadh; 2 0	w.	
Navsari; 5-0	Navsari; 5-0; Sun.	Local;	w.	sl(pr).; pyt.; lib.
Zankhvav; 8 0	Devgadh; 8 0, Thu.	Devgadh., 8 0	w.	
Navsari; 8 0	Navsari; 8 0, Sun.	Dharmoda; 0 6	w.	sl(pr).; pyt.; 4tl.; ch; lib.
Bulsar, 32-0	Ukta; 5-0 Sun.	Dharampur; 14-0	p.	sl(pr).
Vedchha; 5-4	Gandevi, 6-0 Wed.	Sajej; 2-0	w.	
Surat; 14-0	Surat; 13-0 Sat.	Dihen; 1-0	w.	3sl(3pr).; pyt.; cs.; 2tl.; dh.; dp.
Chikhali; Road; 3-0	Gandevi; 1-4 Wed.	(i) Dhanori; 1-4 (ii) Kharel; 2-4	w.	sl(pr).; pyt.; tl.; dh.
Bilimora, 11-0	Chikhali; 4-0	Local.	w., rv., t.	sl(pr).; pyt.; cs.(mp).; 3tl.; ch.
Unai, 16-0	Anklach; 6-0 Sat.	Bansda; 9-0	w., rv.	sl(pr).; cs.(mp).; ch.
Songadh. 7-0	Singpur; 2-0 Mon.	Songadh. 7-0	w.	sl(pr).;pyt.;cs.(c).;tl.
Bulsar. 41-0	Umarthana;4-0 Sat.	Dharampur; 23-0	rv.,p.	sl (lokshala).
Bulsar, 53-0	Huda; 7-0 Tue.	Dharampur; 35-0	p.	
	deserted	Bodhan. 1-0	rv.	tl.
Sara; 7-0	Local; Mon.	Dolvan; 12-0	w.	tl.
Madhi. 17-0	Local; Sat.	Kakdapar; Colony; 3-0	w., rv.	sl(pr).
Zankhvav; 7-0	Devgadh; 6-0 Thu.	Balethi; 7-0	w.	
Surat; 6-0	Surat; 4-0 Sat.	Local	w., p.	sl(pr).; tl.; dp.
		deserted		
Kim. 24-0	Kadod; 4-0 Sun.	Areth; 4-0	rv., w.	
Bulsar; 28-0	Ukta; 3-0 Sun.	Dharampur; 11-0	p.	sl(pr).
Bulsar; 49-0	Rakholi; 8-0 Fri.	Rakholi; 8-0	rv.,p.	sl(pr).
Bulsar, 53-0	Huda; 2-0 Tue.	Penth; 15-0	rv.,p.	

Serial No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati; 1	Direction; Travelling distance. from taluka/peta H. Q. 2	Area (sq. miles); Population; Households; Agricultural Population. 3	Post office; Distance in miles. 4
1429	Pīpodarā MGL.; પીપોદરા	SW; 15-0	3.2; 907; 165; 839	Local;
1430	Pīramāl DRP.; પીરમાલ	E; 14-0	0.5; 212; 42; 212	Dharampur; 14-0
1431	Pisād CRS.; પીસાદ	NW; 4-2	....................deserted ...	....
1432	Pisād PLN.; પીસાદ	E; 6-0	0.1; 1013; 194; 878	Vanesa; . .
1433	Pīṭhā BLR.; પીઠા	E; 11-0	2.9; 1800; 342; 1334	Talwada; 2 0
1434	Pīṭhādarā VRA.; પીઠાદરા	SE; 15-0	3 0; 836; 132; 733	Dolvan; 5-0
1435	Pokharāṇ SGD.; પોખરાણ	W; 2-4	2.0; 99; 18; 99	Songadh; 2-4
1436	Poṇḍhā-Juṅgal DRP., પોંઢા-જંગલ	E; 18-0	1.5; 91; 18; 91	Dharampur; 18-0
1437	Ponsarā NVR.; પોંસરા	N; 10-0	1.9; 1030; 227; 756	Local;
1438	Popaḍā CRS.; પોપડા	N; 12-7	1.0; 423; 90; 365	Lajpore; 1-0
1439	Prātāpanagar BNS.; પ્રતાપનગર	W; 12-0	1.7; 915; 178; 716	Local;
1440	Punā MHW.; પુના	E; 9-0	1.2; 663; 121; 613	Anaval; 9-0
1441	Puṇā CRS.; પુણા	NE; 4-0	2 8; 2381; 453; 1566	Local;
1442	Punā MDV.; પુના	W; 3-0	1.8; 769; 148; 765	Mandvi; 3-0
1443	Punapor MGL.; પુનપોર	E; 32-0	0.9; 287; 38; 286	Umerpada; 2-0
1444	Puṇī NVR.; પુણી	SE; 14-4	1 1; 327; 67; 290	Nagdhara; 2-0
1445	Puṇī PLN.; પુણી	SE; 4-0	1.1; 1318; 270; 963	Local;
1446	Rābaḍā BLR.; રાબડા	SE; 8 0	2 2; 830; 138; 639	Ronvel; 2-0
1447	Rābaḍī PRD.; રાબડી	SE; 8-0	1.4; 648; '14; 648	Mota Vaghchhipa; 2-0
1448	Rāhej GND.; રાહેજ	N; 0-4	0.6; 361; 70; 164	Gandevi; 1 0
1449	Rāhor DRP.; રાહોર	SE; 32-0	1.3; 132; 28; 132	Dharampur; 32-0
1450	Rājagarī CRS.; રાજગરી	W; 15-0	1.4; 271; 57; 259	Sunwali; 1-4
1451	Rājaparālumbhā BRD.; રાજપરાલુંભા	NE; 3-4	0.3; 485; 95; 457	Varad; 2-0
1452	Rājapur BNS.; રાજપુર	W; 11-6	3.1; 141; 22; 141	Pratapnagar, 1-
1453	Rājapurī-Jungal DRP.; રાજપુરી-જંગલ	E; 11-0	3 6; 259; 51; 258	Dharampur; 11-
1454	Rājapurī-Talāṭ DRP.; રાજપુરી તલાટ	SE; 4-0	1.6; 786; 113; 753	Dharampur; 4-
1455	Rajawāḍ BRD.; રજવાડ	W; 15-0	2.7; 479; 97; 453	Mandvi; 3-
1456	Rājawaḍ MDV.; રાજવડ	E; 4 0	0.4; 277; 41; 230	Mandvi; 4-
1457	Rajawāḍā NVR.; રજવાડા	SE; 9-4	1.0; 86; 18; 71	Astagam; 1-

Railway St.; Distance.	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance.	Drinking water facilities	Institutions and other information.
5	5	7	8	9
Kim; 5-0	Kim; 5-0	Local;	w.	sl(pr).; pyt.; 3cs.; 2tl.; mq.; dg.; ch.
Bulsar; 32-0	Ukta; 3-0 Sun.	Dharampur; 14-0	p.,n.	
		...deserted ...		
Gangadhra; 3-0	Gangadhra; 3-0	Bardoli; 3-0	w.	pyt.; tl.
Bulsar; 11-0	Bulsar; 8-0	Segwa; 2-0	w.	sl(pr).; pyt.; 3tl.; dp.
Unai; 8-0	Panchol; 3-0 Fri.	Dolvan; 6-0	w.	sl(pr).; pyt.
Doswada; 1-4	Songadh; 2-4 Sun.	Songadh; 2-4	w.	pyt.
Bulsar; 36-0	Ukta; 10-0 Sun.	Dharampur; 18-0	rv.	
Maroli, 1-4	Maroli; 1-4	Maroli; 1-4	w.	sl(pr).; pyt.; 3tl.; mq.; dg.; ch.; lib.
Sachin; 4-0	Surat; 10-0 Sat.	Laipore; 1-0	w.	sl(pr).; pyt.; tl.; ch., lib.
Dholikui; 9-0	Chapaldhara; 1-0 Sat.	Local;	w.,rv.	sl(pr).; pyt.; cs.(mp.); tl.; dp
Anaval; 9-0	Valvada; 0-4 Sun.	Valvada; 1-0	w.	sl(pr).; pyt.; cs.(c).; lib; dp. Centre of Sarvodaya Kendra.
Surat. 3-0	Surat; 4-0 Sat.	Magol, 1-0	w.	sl(pr).; pyt.; 2tl.; dg.; oh.; cn.; lib.; 3dp.
Madhi. 10-0	Mandvi; 3-0 Wed.	Local;	rv.,w.	sl(pr).; cs.(c).; 2tl.
Umerpada; 2-0	Umerpada, 2-0		w.	cs.
Navsari; 13-0	Navsari; 13-0 Sun.	Satem, 2-0	w.	sl (lokshala).; lib.
Bardoli, 9-0	Sarbhan; 3-0	Local.	w.	sl(pr).; cs.(mis.).; 5 tl. dh.; ch.; lib.; 4d
Pardi, 3-0	Navera; 2-0 Sun.	Gandaria; 2-4	w.,t.	tl.
Pardi, 10-0	Lakhamapore, 3-0 Sat.	Panchlai; 1-0	w.	sl(pr).; pyt.
Gandevi; 1-0	Gandevi; 1-0 Wed.	Gandevi; 0-4	w.,t.	fr (An. Vad 14); tl.
Bulsar, 50-0	Huda; 6-0 Tue.	Dharampur; 32-0	p.	
Surat; 15-0	Surat; 15-0 Sat.	Sunwali; 1-0	w.	
Timberva; 1-0	Surali; 6-0 Thu.	Rayum; 1-0	w.	sl(pr).; lib.
Dholikui, 1-4	Chapaldhara; 0-4 Sat.	Pratapnagar; 0-2	w.,rv.	
Bulsar. 29-0	Local; Fri.	Dharampur; 11-0	rv.,str., p.	pyt.
Bulsar; 21-0	Vadpada; 1-0 Tue.	Dharampur; 4-0	w.	sl(pr).
Madhi, 6-0	Kadod; 4-0 Sun.	Kadod; 4-0	w.	sl(pr).
Madhi, 12-0	Mandvi; 4-0 Wed.	Vankla; 0-4	rv.	sl (lokshala).
Navsari; 11-0	Gandevi; 4-0 Wed.	Local;	w.	tl.

Serial No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati. 1	Direction; Travelling distance from taluka/Pets H.Q. 2	Area (sq. miles.); Population.; Households; Agricultural Population. 3	Post office; Distance in miles. 4
1458	Rakhasakhadi MDV.; રખસખડી	NE; 6-0	1.0; 173; 27; 173	Mandvi; 6-0
1459	Rakhavāv MDV.; રખવાવ	E; 11-0	......deserted	......
1460	Rāmakuvā VRA. રામકુવા	SW; 9-0	1.3; 392; 71; 385	Buhari; 4-0
1461	Rāmapurā Du VRA.; રામપુરાદુર	SE; 15-0	0.5; 197; 29; 168	Buhari; 4-0
1462	Rāmapurā-Kanālā SGD.; રામપુરા-કનાલ	S; 5-0	0.9; 211; 46; 211	Songadh; 5-0
1463	Rāmapurā-Kothār SGD.; રામપુરા-કોઠાર	S; 3-0	0.7; 74; 13; 72	Songadh; 3-0
1464	Rāmapurā Najik VRA.; રામપુરા નજીક	N; 3-0	0.5; 158; 24; 158	Vyara; 3-0
1465	Raṇakapor MGK.; રણકપોર	SW; 6-0	1.9; 393; 75; 382	Simodra; 2-0
1466	Rānakuvā CKL.; રાનકુવા	E; 7-0	2.3; 1843; 335; 1447	Local;
1467	Rānapāḍā DRP.; રાનપાડા	N; 2-0	0.3; 224; 30; 224	Dharampur; 2-0
1468	Rāṇat Drp.; રાણત	E; 4-0	1 9; 668; 131; 654	Amkach; 0-4
1469	Rānaveri DRP.; રાનવેરી	E; 12-0	0.3; 179; 33; 179	Dharampur; 12-0
1470	Rānaveri VLD.; રાનવેરી	S; 1-0	2.1; 826; 144; 826	Valod; 2-0
1471	Rānaveri-Kallā CKL.; રાનવેરી કલ્લા	E; 10-0	3 1. 1608; 275; 1526	Rankuva; 2-4
1472	Rānav. riKhurad CKL; રાનવેરી ખુરદ	E; 13-0	3 3; 1374; 241; 1343	Dholikuwa; 1-0
1473	Rāndeı CRS.; રાંદેર	NW; 5-0	5 3; 17611; 3641; 1731	Local;
1474	Raṅgapur BNS., રંગપુર	W; 6-0	1 7; 571; 112; 565	Bansda; 6-0
1475	Rāni-Āmbā SGD.; રાની આંબા	S; 1-4	1.5; 756; 135; 392	Songadh; 1-4
1476	Rāni-Āmbā VRA.; રાની આંબા	SE; 13-0	1.5; 240; 40; 204	Vyara; 14-0
1477	Rāṇi-Faḷiā BNS.; રાણી ફળીઆ	NW; 2-0	2.1; 848; 185; 357	Bansda; 2-0
1478	Rānikuṇd MGL.; રાનીકુંડ	E; 14-0	0.5; 22; 3; 22	Umerpada; 5-0
1479	Ranodarā NVR.; રણોદરા	N, 9-6	0.6; 221; 53; 80	Veshma; 1-0
1480	Rāsamāṭi SGD.; રાસમાટી	S; 36-0	0.6; 34; 6; 34	Navapur, 18 0
1481	Rātā PRD.; રાતા	S; 10-0	1.4; 881; 158; 755	Kaparli; 2-4
1482	Ratanīā MDV.; રતનીઆ	S; 2-0	3.2; 934; 190; 790	Tarsada Bargama; 1-0
1483	Ratolā MGL.; રતોલા	S; 4-0	0.6; 443; 67; 401	Wankal; 4-0
1484	Raṭoṭi MGL.; રટોટી	S; 7-0	3.2; 462; 73; 462	Wankal; 2-0
1485	Rāvalā CRS.; રાવલા	SE; 10-0	1.5; 557; 106; 526	Sachin; 3-0
1496	Ravāṇiā BNS.; રવાણીઆ	SW; 10-0	3.5; 595; 118; 595	Bansda; 10-0

Railway St.; Distance in miles.	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance. in miles.	Drinking water facilities	Institution and other information.
5	6	7	8	9
Madhi 13-0	Pipalwada 2-0 Sat.	Gamtalao-Khurad. 3-0	w.	sl(pr).
....	....	deserted	....	....
Vyara; 11-0	Buhari; 4-0 Wed.	Jesingpur 2-0	w.	sl(pr).; pyt.
Unai; 10-0	Buhari; 4-0 Wed.	Gadat 4-0	w.,rv.	
Songadh; 5-0	Songadh; 5-0 Sun.	Songadh 5-0	w.	sl(pr).
Songadh; 3-0	Songadh; 3-0 Sun.	Songadh 3-0	w.	
Vyara; 3-0	Vyara; 3-0 Sat.	Vyara 3-0	w.	tl.
Asarma; 0-4	Velachha; 4-0	Tadkeshwar 6-4	w.	cs(c).; tl.
Local	Local;	Local	w.	sl(pr).; pyt.; cs.(c).; tl.; dg.; dh.; ch.; 3dp.
Bulsar; 20-0	Dharampur; 2-0 Mon.	Dharampur 2-0	w.	sl (lokshala).
Bardoli; 10-0	Mahuwa; 4-4 Mon.	(i) Sarbhan 2-0 (ii) Kothi. 3-0	w.,rv.	sl(pr).; pyt.; 2tl.; ch.
Bulsar; 30-0	Ukta; 4-0 Sun.	Dharampur 12-0	str ,p.	
Madhi; 11-0	Valod; 2-0 Fri.	Buhari; 0-2	w.	sl(pr.).
Kankuva, 2-4	Kangwai; 2-4 Fri	Rankuwa; 3-0	w	sl(pr).; pyt.; cs. (mp.)
Dholikuwa; 1-0	Kangwai, 2-4 Fri.	Kharoli; 1-0	w.	sl(pr).; pyt.; cs. (mp.) dg.
Surat; 5-0	Surat; 5-0 Sat.	Local;	pl.	7sl(6pr.,h).; mun.; 2cs.; fr(Asd. Vad 15).; 19tl.; 8mq.; 11dg.; 5dh.; 3gym.; 9lib.; 4dp.
Anaval; 8-0	Lemzar; 0-4 Sun.	Kandolpada, 4-0	w., t.	sl(pr.)
Songadh; 1-4	Songadh; 1-4 Sun.	Songadh; 1-4	w.	sl(lokshala).; pyt.; tl.
Vyara; 14-0	Balpur; 4-0 Mon.	Vyara; 13-0	w., t.	sl(pr).
Unai, 6-0	Bansda; 2-0 Fri	Bansda; 2-0	w., rv.	sl(pr)
Keori, 2-0	Keori; 2-0	Keori; 2-0	w.	
Maroli; 7-0	Maroli; 7-0 7-0	Veshma; 1-4	w.	mq.
Navapur, 18-0	Varsa; 10-0 Wed.	Navapur, 18-0	w., rv	
Vapi, 4-0	Local Wed.	Vapi; 4-0	w.	sl(pr).
Madhi, 10-0	Mandvi; 2-0 Wed.	Local;	w.	sl(pr); cs ; tl.; ch.
Wankal; 4-0	Wankal; 4-0 Fri.	Mosali; 4-0	w.	pyt.; cs.
Wankal; 2-0	Wankal; 2-0 Fri.	Mangrol; 7-0	w.	pyt.
Sachin; 3-0	Surat; 11-4; Sat.	Bonandh; 1-0	w.	sl(pr).; 2cs. (c., cotton); tl.; dh.; ch.; lib.; dp.
Unai; 17-0	Anklach; 4-0; Sat.	Bansda; 10-0	w.,rv.,	sl(pr).

Serial No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati. 1	Direction; Travelling distance. from taluka/ peta H Q. 2	Area (sq. miles.); Population.; Households; Agricul-tural Population. 3	Post office; Distance in miles. 4
1487	Rāyabor BNS.; રાયબોર	SE; 5-0	3.1; 545; 128; 542	Banada· 5-0
1488	Rāyagaḍh VRA.; રાયગઢ	S; 29-0	3.0; 355; 64; 355	Unai; 10-0
1489	Rāyam BRD.; રાયમ	NE; 5-4	1.3; 753; 154; 680	Varad; 1-0
1490	Rāyamāl DRP.; રાયમાલ	S; 30-0	2.1; 259; 54; 259	Dharampur; 30-0
1421	Regāmā MDV.; રેગામા	N; 8-0	2.9; 742; 119; 725	Mandvi; 8-0
1492	Regaṇakach VRA.; રેગણકછ	SE; 14-0	0.5; 321; 55; 321	Buhari; 12-0
1493	Rentalāv PRD.; રેંટલાવ	S; 4-0	0.4; 1012; 237; 271	Local;
1494	Reṭhavāṇiā CKL.; રેઠવાણીઆ	NE; 5-4	1.1; 784; 126; 703	Rankuwa; 2-0
1425	Rohiṇā PRD.; રોહીણા	SE; 7-0	3.4; 2126; 352; 1988	Local;
1496	Rohīyāḷ-Jungal DRP., રોહીયાળ જંગલ	SE; 42-0	2.9; 300; 51; 300	Dharampur; 42-0
1497	Rohīyāḷ-Talāt DRP.; રોહીયાળ તલાટ	SE; 36 0	2 0; 287; 63; 286	Dharampur; 36-0
1498	Rolā BLR.; રોલા	NE, 8 3	2 9; 1000. 205; 680	Dungri; 1-4
1499	Roṇavel BLR.; રોણવેલ	E; 9-0	3.1; 924; 193; 488	Local;
1500	Rosawāḍ MDV.; રોસવાડ	NW; 19-4	1.5; 794; 156; 783	Tadkeshwar 2-0
1501	Rūdhawāḍā KMJ.; રૂઢવાડા	E; 12-0	1.0, 225; 43; 218	Vihan; 1-0
1502	Rūmalā CKL.; રૂમલા	SE; 10-0	2 3; 3513, 589; 3442	Local;
1503	Rūṇḍha CRS. રૂંઢ	W; 5-4	1.4; 570; 127; 278	Magdalla; 1-0
1504	Rūndhā MDV.; રૂંધા	E; 9-0	..................deserted	....
1505	Rūpaṇ MDV.; રૂપણ	N; 1-4	1.1; 247; 46; 247	Mandvi; 1-4
1506	Rūpavāḍā VRA.; રૂપવાડા	W; 7-0	2.0; 663; 123; 618	Kapura; 3-0
1507	Rūpavāḍā SGD.; રૂપવાડા	S; 3-0	1.2; 190; 32; 190	Songadh; 3-0
1508	Rūpavel BNS.; રૂપવેલ	NW; 9-5	3.1; 1423; 243; 1409	Anawa; 2-0
1509	Rūvā BRD.; રૂવા	N; 7-0	0.9; 409; 83; 363	Pardi Kadod 1-4

Railway St.; Distance in miles.	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance in miles.	Drinking water facilities	Institutions and other information.
5	6	7	8	9
Unai; 12-0	Chorawani; 5-0; Thu.	Bansda; 5-0	w., rv.	sl(pr).; cs.; (c).
Dungarda; 2-0	Local; Sat.	Unai; 10-0	w.	sl(pr).
Timberva; 1-4	Kadod; 5-0; Sun.	Local;	w.	sl(pr).; pyt.: dg.; ch.; lib.
Bulsar; 49-0	Rakholi; 5-0; Fri	Khandvel; 4-0	w., rv., p.	sl(pr).
Wankal; 5-0	Amba; 3-0 Sat.	Mandvi 8-0	w.	sl(lokshala).; pyt.; cs. (c). unregistered.
Unai, 14-0	Panchol; 9-0; Fri.	Gadat; 2-2	w., rv.	sl(lokshala).; pyt.; cs. (mp.)
Local:	Motiwada; 0-4; Tue.	Local;	w., t.	sl(pr).; mq.; 2dh.; ch.; lib.; dp.
Rankuwa; 2-0	Rankuwa; 2-0;	Manekpor; 0-4	w.	sl(pr).;mq.
Udwada; 7-4	Local; Thu.	Local;	w., rv., t.	2sl(2pr)., pyt.; tl.; 3dp.
Bulsar; 60-0	Varwath; 8-0; Sun.	Dharampur; 42-0	p., rv.	sl(pr.)
Pardi: 25-0	Sidha; 5-0; Sat.	Nanapondha 13-0 (Chiwal);	rv., p.	
Dungri; 1 4	Dungri; 1 4	Dungri; 1 4	w.	sl(pr).; pyt.; cs. (c).; 2tl.; dg.
Bulsar; 9-0	Navera; 2-0; Sun	Local;	w:	sl(pr).; pyt.; cs.(c.); dh.; dp.;
Kim. 12-0	Amba. 12 0 Sat.	Tadkeshwar: 1-4	w., p.	sl (pr). [illegible]; cch.
Bardoli. 7-0	Bardoli: 7 0 Sat.	Bardoli, 7 0	w	pyt.; tl.
Bulsar: 10 0	Fadwel; 4 0 Fri.	Fadwel, 4-0	w., v.	2sl (2pr) pyt; cs; (c); tl; lib. dp.
Surat, 5-0	Surat: 5-0 Sat.	Local.	w., r (o in summer).	sl (pr). tl, dg; dh.
....	.... deserted	....	....	....
Madhi, 9 4	Mandvi; 1-4 Wed.	Mandvi. 1-4	w.	tl.
Vyara; 6-0	Vyara: 6-0 Sat.	Khanpur; 1-0	w.	sl (pr) py.t; cs.; tl.; ch.; lib.:
Doswada: 2-0	Songadh: 3-0 Sun.	Songadh; 3 0	w.	pyt. sl (pr).
Anawal. 2 0	Chapaldhara; 1-0 Sat.	Lakhawadi; 0-4	w.	sl (pr); pyt, cs; (fmg)
Timberva; 3-0	Kadod; 6-0 Sun.	Pardi-khoj; 1-0	w.	tl; (Lalji Maharaj) ch.

Serial No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati. 1	Direction; Travelling distance. from taluka/ peta H. Q. 2	Area (sq. miles); Population; Households; Agricultural population. 3	Post office; Distance in miles. 4
1510	Rūzavaṇī CKL.; રૂઝવણી	SE; 11-0	2.2; 806; 140; 804	Rumola; 4-0
1511	Sābaragām CRS.; સાબરગામ	E; 0-3	0.2; 17; 3; 17	Kumbharia; 1-4
1512	Sachīn CRS.; સચીન	SE; 10-0	2.2; 1146; 269; 642	Local;
1513	Sādaḍadevī BNS.; સાદડદેવી	E; 12-0	2.9; 98; 20; 96	Vaghai; 2-0
1514	Sādaḍakuvā SGD.; સાદડકુવા	W; 4-0	1.7; 405; 67; 405	Songadh; 4-0
1515	Sādaḍāpāṇī MGL.; સાદડાપાણી	E; 25-0	1.0; 246; 39; 238	Umerpada; 3-4
1516	Sādaḍavāṇ VRA.; સાદડવાણ	N; 5-0	1.8; 373; 68; 366	Vyara; 4-0
1517	Sādaḍavel SGD.; સાદડવેલ	S; 12-0	1.7; 310; 48; 295	Songadh; 12-0
1518	Sādaḍavel CKL.; સાદડવેલ	E; 6-0	6.7; 2484; 442; 2351	Local;
1512	Sādaḍaverā DRP.; સાદડવેરા	E; 20-0	2.9; 159; 36; 159	Dharampur; 19-0
1520	Sādaḍī MDV.; સાદડી	S; 3-0	1.1; 243; 43; 232	Tarsada Bargama; 3-0
1521	Sādaḍum SGD.; સાદડુમ	S; 33-0	2 1; 460; 67; 460	Navapur; 18-0
1522	Sādakapor CKL., સાદકપોર	E; 2-4	7.0; 3163; 606; 2999	Chikhali; 2-0
1523	Sadalāv NVR.; સદલાવ	SE; 7-0	1.7; 783; 158; 699	Munsad; 1-0
1524	Saḍodarā NVR.; સડોદરા	N; 9-0	0.5; 255; 42; 137	Veshma; 0-4
1525	Safetābād OPD.; સફેતાબાદ	S; 2-4	1.2; .... deserted	....
1526	Safetapurā OPD.; સફેતપુરા	W; 13-0	0.4; ....deserted	....
1527	Sāgarā NVR.; સાગરા	NW; 4-0	1.2; 768, 169; 705	Tavcli; 2-0
1528	Sagavāsyāḍalā OPD.; સગવાસ્યાડલા	E, 8-0	0.9; 562; 68; 559	Gothan, 2-0
1529	Śāh MGL.; શાહ	SW; 2-0	1.4; 441; 84; 153	Mosali; 1-0
1530	Śāhapor VLD.; શાહપોર	NW, 1-7	0.5, 303; 64; 285	Valod; 1-7
1531	Śāhapur VRA.; શાહપુર	W, 5-0	1 0, 206; 37; 206	Vyara; 5-0
1532	Śāhu NVR.; શાહુ	E, 10-6	1 2; 498; 116; 465	Ugat; 0-2
1533	Sāhuḍā DrP.; સાહુડા	SE; 35 0	1 8; 277; 56; 276	Dharampur; 35-0
1534	Sajanī-Baraḍā DrP.; સજની બરડા	E; 18-0	2.5; 296; 61; 296	Dharampur, 18-0
1535	Sālaiyā MDV.; સાલૈયા	N; 4-0	2.5; 1083; 185; 1046	Mandvi; 4-0
1536	Salavāv PrDR.; સલવાવ	S; 7-0	3.1; 1702; 341; 1434	Vapi; 2-
1537	Sālej GND.; સાલેજ	N; 3-4	1.3; 1166; 244; 944	Local;
1538	Sālepara OPD.; સાલેપરા	SW; 1 0	0.5; ....deserted	....
1539	Salī MGL.; સલી		0.1; 72; 8; 72	Umerpada; 4-
1540	Sālīābād OPD.; સાલીઆબાદ	W, 10-0	0 6; ....deserted	....
1541	Sāmaparā MGL.; સામપરા	E; 14-0	0.8; 150; 28; 150	Wankal; 10-
1542	Śāmāpor NVR.; શામાપોર	W; 9-0	5.59; 1576; 515;	Matvad; 2
1543	Śāmapurā KMJ.; શામપુરા	E.; 11-0	2.9; 1414; 240; 1221	Vihan; 1-

Railway St.; Distance in miles.	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance in miles.	Drinking water facilities	Institutions and other information.
5	6	7	8	9
Bulsar; 15-0	Khergam; 3-0	Khergam; 3-0	w.	sl. (pr.); pyt.; tl.
Surat; 2-0	Surat; 2-4 Sat.	Local;	w.	
Local;	Surat; 9-0 Sat.	Local;	w.	2sl (pr, m).; pyt.; cs; (c).; fr (Sm. Vad-Last Sunday) 3tl.; mq; dg.; ch.; lib.
Dungarva; 1-0	Vaghai; 2-0	Vaghai; 2-0	w.,rv.	
Songadh; 4-0	Songadh; 4-0 Sun.	Songadh; 4-0	w.	sl (pr).; pyt.
Keori; 0-4	Keori; 0-4		w.	sl (lokshala).; lib.
Vyara; 4-4	Vyara; 4-4 Sat.	Vyara; 5-0	w.	sl. pyt.
Songadh; 12-0	Songadh; 12-0 Sun.	Songadh; 12-0	w.,rv.	sl. (lokshala).; pyt.
Rankuwa; 3-0	Fadwel; 4-0 Fri.	Rankuwa; 3-0	w.	sl. (pr).; pyt; 2tl.; ch.
Bulsar; 37-0	RajpuriJungle; 11-0 Thu.	Dharampur; 20-0	p.	sl. (pr).
Madhi; 5-0	Mandvi; 3-0 Wed.	Local.	w.	cs; tl.
Navapur. 18-0	Singana; 8-0 Tue.	Virathva; 5-0	rv.,w.	sl. (lokshala).; pyt.
Bilimora. 9-0	Chikhali. 2-0	Chikhali. 2-4	w.	sl. (pr).; pyt; cs. (c).; tl.
Navsari. 7-0	Navsari. 6-0 Sun.	Munsad; 2-0	w.,p.	3tl.
Maroli. 7-0	Maroli; 7-0	Veshma. 1-0	w.	tl.
....	....	deserted. ...	....	....
....	....	deserted.	....	....
Maroli. 2-0	Maroli; 2-0	Navsari. 4-0	w	sl (pr).; tl.; 2lib.
Sayan; 3-0	Surat; 7-0 Sat.	Sandhier; 2-0	w.	sl(pr).;cs.;tl;dh.;ch.;lib
Mangrol; 1-0	Wankal; 7-0 Fri.	Mosali. 1-0	w.,n.	sl (pr).;fr (Ct. Sud 15).; tl.; mq.; dg.
Madhi. 10-0	Valod. 1-7	Valod 1-7	w.	sl (pr).; lib.
Vyara. 5-0	Vyara; 5-0 Sat	Tichakpura; 1-0	w	pyt.
Navsari. 10-0	Dholikui. 2-0 Sun	Ugat. 0-4	w.	tl
Bulsar. 53-0	Lavkar; 5-0 Sat.	Chiwal. 23-0	w.,p.rv.	sl (pr).; tl.
Bulsar. 36-0	Bopi; 3-0 Fri	Dharampur. 18-0	P.	
Zankhvav; 11-0	Mandvi. 4-0 Wed	Mandvi. 4-0	w.,rv.	sl (pr).; pyt.; ch.
Vapi. 2-4	Vapi. 2-4	Local.	w.,rv.,t.	2Sl (2pr).; pyt.
Vedchha 2-4	Gandevi. 5-0 Wed	Local;	w.	sl (pr).; pyt.; cs. (mp).; dh.; lib.
....	....	deserted. ...	....	....
Umerpada. 4-0	Umerpada; 4-0			
....	....	deserted.	....	....
Zankhvav. 4-0	Zankhvav; 4-0	Zankhvav. 4-0	w n.	
Navsari 9-0	Navsari; 10-0 Sun.	Matvad; 2-0	w P.	sl (pr).; lib.
Bardoli 8-0	Bardoli; 8-0 Sat.	Local.	w.	sl (pr).; pyt.; 2tl.; ch.; lib.; 2dp.

Serial No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati. 1	Direction; Travelling distance from taluka peta H. Q. 2	Area (sq. miles.); Population.; Households; Agricultural Population. 3	Post office; Distance in miles. 4
1544	Sāmarakuvā SGD.; સામરકુવા	NW; 1-20	0.8; 49; 9; 47	Songadh; 12-0
1545	Sāmarapāḍā PRD.; સામરપાડા	E; 11-0	1.1; 780; 136; 764	Mota Vaghchhipa; 8 0
1546	Sāmarasiṅgī DRP.; સામરસીંગી	E; 19-0	0.6; 278; 68; 181	Dharampur; 19-0
1547	Sāmarod CRS.; સામરોદ	S; 14-0	0.8; 467; 106 ; 420	Palsana; 3-0
1548	Samarolī CKL.; સમરોલી	W; 0-1	1.8; 2091; 391; 1227	Chikhali; 1-0
1549	Samathāṇ BRD.; સમથાણ	E; 7-4	1.9; 514; 102; 425	Kadod; 2-0
1550	Sāmbā MHW.; સાંબા	S; 10-4	1.9; 818; 143; 810	Mahuwa; 9-0
1551	Śaṇadharā MGL.; શણધરા	S; 7-0	2.1; 105; 19; 105	Wankal; 4-0
1552	Śanavallā M H W.; શણવ લા	SW; 9-0	1.4; 527; 95; 504	Satem; 2-4
1553	Sandalapur NVR.; સંદલપુર	NE; 7 0	2.3; 772; 167; 344	Veshma;; 2-0
1554	Sāṇḍhakuvā SGD.; સાંઢકુવા	S; 6-0	0.9; 268; 45; 268	Songadh; 6-0
1555	Sāndhier OPD.; સાંધીએર	E; 5-2	5.2; 1492; 297; 1173	Local;
1556	Saṇiya-Hemād CRS.; સણીયા હેમાદ	NE; 6-3	1.2; 1058; 198; 792	Local;
1557	Saṇiya-Kaṇade CRS.; સણીયા કણદે	S; 6-4	1.1; 529; 99; 483	Deladva; 1-
1558	Sāṅkaḷi VRA.; સાંકળી	S; 7-0	1 5; 435; 65; 434	Vyara; 6-
1559	Śaṅkara-Taḷāv BLR.; શંકરતળાવ	N; 6-0	0 7; 325; 66; 279	Dungari. 1-
1560	Śaṅkara-Taḷāvaḍī MHW.; શંકર તળાવડી	W; 0-4	0.6; 80; 16; 80	Mahuwa; 2-
1561	Sāṅkarī BRD.; સાંકરી	NE; 5-0	0.6; 558, 122; 496	Akoti. 2-
1562	Sāṅkı PLN.; સાંકી	N; 0-5	2.0; 422; 88; 386	Bagumra; 1-
1563	Sarā BNS.; સરા	NE; 6-0	7.4; 1043; 222; 615	Unai; 5-
1564	Sarabhāṇ BRD., સરભાણ	S; 5-0	3.1; 2734; 579; 1791	Local;
1565	Saradā MGL.; સરદા	E; 25-0	1.1; 282; 46; 273	Umerpada; 2-
1566	Sarafudīnapur OPD.; સરફુદીનપુર	NE; 10-0	0.9; ....deserted	....
1567	Sarai NVR.; સરઈ	N; 5-0	1.2; 647; 127; 568	Veshma; 3-
1568	Saraiyā CKL.; સરૈયા	NE; 12-0	2.4; 834; 186; 834	Jogwad; 1-
1568	Saraiyā VRA.; સરૈયા	SE; 4-0	1.8; 489; 89; 486	Vyara; 3-

Railway St.; Distance in miles.	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance in miles.	Drinking water facilities	Institutions and other information.
5	6	7	8	9
Songadh; 12-0	Songadh; 12-0 Sun.	Mandvi; 10-0	w.	pyt.
Pardi; 15-0	Lakhampore; 2-4 Sat.	Dhagadmal; 1-0	w.	sl (pr).
Bulsar; 37-0	Rajpuri Jungles; 9-0 Thu.	Dharampuri; 9-0	p.	sl (pr).
Sachin; 5-0	Surat; 4-4 Sat.	Palsana; 3-0	w.	sl (pr).; 2mq.; dg.; ch.
Bilimora; 6-0	Chikhali; 1-0	Chikhali; 0-1	w.	2sl (pr.,h.)pyt,;cs(c).;tl. dg.; lib.; dp.
Timberva; 3-4	Kadod; 2-0 Sun.	Hatali; 0-6	w.	sl (pr).; tl.; lib.
Anaval; 11-0	Valvada; 3-4 Sun.	Vank; 1-4	w.	sl (pr).; pyt.
Wankal; 4-0	Wankal; 4-0 Fri.	Mangrol; 7-0	w.	
Navsari; 14-0	Kharvan; 3-0 Sat.	Local;	w.rv.	sl (pr).; pyt.
Navsari; 10-0	Navsari; 8-0 Sun.	Local;	w.	sl (pr).; pyt.; 3tl.; ch.; lib.
Songadh; 5-0	Songadh; 6-0 Sun.	Songadh; 6-0	w.	sl (pr).; pyt.
Sayan; 5-0	Surat; 14-0 Sat.	Local;	w.	sl (pr).; pyt.; 4tl.; dg.; ch.; 2lib.; dp. An ancient reservoir which appears to have been built in the Hijri 101 year.
Surat, 5-0	Surat; 5-0 Sat.	Kumbharia 1-3	w.	sl (pr).; 3tl.; lib.
Bhestan, 1-4	Surat; 6-0 Sat.	Local	w.	sl (pr).; cs.; tl.
Vyara; 6-0	Balpur; 1-0 Mon.	Vyara, 6-0	w.rv.	sl (lokshala.) pyt.; cs.
Dungari; 1-0	Dungari; 1-0,	Kapra; 1-4	w.,t.	sl (pr).
Bardoli; 12-0	Mahuva; 2-0 Mon.	Mahuva, 2-0	w., rv.	sl (pr).; pyt.; mq.; dg.
Timberva; 0-1	Surali; 5 0 Thu.	Rayam; 0-1	w.	sl (pr).
Tantithaiya, 1-0	Chalthan; 1-0	Karan. 1-0	w., t.	sl (pr).; 2tl.; ch.
Kevdi Road; 1-0	Kharjai; 2-0 Wed.	Bansda; 6-0	w., rv.	sl (pr).; cs (c).; 2tl.;ch.
Bardoli; 7-0		Local,	w., t.	2sl (2pr)., pyt.; 3cs. (3c).; 8tl.; m.; mq, 5dg.; dh; ch.; 2lib.; (dp.
Keori; 0-6	Keori; 0 6		w., rv.	2sl (lokshala).; tl. 4lib.
....	....	deserted........	....	....
Navsari; 4-0	Navsari; 4-0 Sun.	Kasba; 2-0	w.	pyt.; cs. (mp).; 2tl. ch.; lib.
Kankuva. 6-0	Kangwai; 2-0 Fri.	Tankal; 3-0	w., rv.	sl (pr).; mq.; dg.; dp.
Vyara, 3-4	Vyara; 3 4 Sat.	Vyara, 3-4		sl (pr).; pyt.; ch.

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1570	Sarajāmalī SGD.: સરજામલી	N;	10-0	0.5;	101;	13;	101	Songadh;	10-0
1571	Sarakui MDV.; સરકુઇ	NE;	5-0	1.7;	568;	85;	556	Mandvi;	5-0
1572	Sarakuvā VRA.; સરકુવા	NE;	3-0	1.0;	256;	53;	247	Vyara;	3-0
1573	Sāraṇ DRD.; સારણ	SW;	6-4	1.1;	712;	128;	633	Rentlaw;	2-0
1574	Sārangapur BLR.; સારંગપુર	E;	11-0	1.1;	329;	51;	329	Ronvel;	1-0
1575	Sārāpāḍā MDV.; સારાપાડા	N;	14-0	0.9;	............deserted			....	...
1576	Sarapor NVR.; સરપોર	SE;	9-2	1.1;	644;	135;	550	Pardi;	
1577	Saras OPD.; સરસ	W;	4-0	5.1;	1334;	294;	687	Local;	
1578	Sarasāṇā CRS.; સરસાણા	SW;	7-0	0.8;	252;	47;	230	Khajod;	0-4
1579	Sarasāṇā OPD.; સરસાણા	NE;	4-4	1.7,	239;	42;	238	Olpad;	6-0
1580	Sarasī MDV.; સરસી	N;	18-0	1.7.	20;	85;	16	Umerpada;	5-0
1581	Sarathāṇā KML.; સરથાણા	W;	7-3	1.3,	158;	20;	97	Varachhali;	1-0
1582	Sarāv NVR.; સરાવ	SW;	8-0	0.9;	718;	146,	510	Abrama;	1-0
1583	Saravāṇafokaḍi MGL.; સરવાણફોકડી	NE;	22-0	4.8;	631;	111;	631	Deli;	12-0
1584	Sāravaṇī CKL.; સારવણી	E;	11-0	2.2;	1468;	259;	1458	Local;	
1585	Saravaraṭālī DRP.; સરવરટાલી	S;	33-0	1.5,	200;	37;	200	Dharampura;	33-0
1586	Sareṭhī BRD.; સરેઠી	.. ..		. deserted			...	....	
1587	Sārībujarang GND.; સરીબુજરંગ	W;	4-0	1.2;	3506;	748;	973	Amalsad;	
1588	Sarikhurad GND.; સરીખુરદ	W;	5-1	0.6,	729;	145,	707	Lushwada;	0-[illegible]
1589	Sarodhı BLR.; સરોધી	N.	3-0	1.4.	601,	132;	523	Lilapore;	3-[illegible]
1590	Sarodhi PRD.; સરોધી	SE;	5-0	1.5;	765;	140;	739	Rentlaw;	2-[illegible]
1591	Sarol OPD.; સરોલ	SW,	3-4	0.7;	158;	26;	112	Sonsak;	4-[illegible]
1592	Sāroli CRS.; સારોલી	E;	5-2	0.8;	529;	105;	445	Kumbharia,	0-[illegible]
1593	Sarolī OPD.; સરોલી	S;	6-0	1.4,	603;	108;	512	Variav;	3-[illegible]
1594	Saroṇ BLR.; સરોણ	N.	3-2	1.0;	745;	148;	596	Bulsar;	4-[illegible]
1595	Saroṇā NVR.; સરોણા	NE;	6-4	0.8;	399;	73;	145	Veshama.	4[illegible]
1596	Sātakāśi SGD.; સાતકાશી	N;	12-0	0.5;	61,	11;	37	Songadh.	12[illegible]
1597	Satavaṇ MGL.; સટવણ	E;	43-0	2.5;	297,	47;	279	Umerpada;	9[illegible]
1598	Sātavānkaḷ DRP.; સાતવાંકળ	E;	38-0	1.1;	61;	15;	61	Dharampur.	38[illegible]
1599	Sātem NVR.; સાતેમ	SE;	12-0	3.0;	2336;	461;	1758	Local;	
1600	Saṭhavāv MDV.; સઠવાવ	N;	4-0	2.2;	1036;	179;	1008	Mandvi;	

Railway St.; Distance.	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance.	Drinking water facilities	Institutions and other information.
5	6	7	8	9
Songadh; 10-0	Songadh; 10-0; Sun.	Songadh; 10-0	w.	pyt.
Madhi; 15-0	Mandvi; 5-0; Wed.	Santhvav; 2-0	w.	sl (pr).
Vyara; 3-0	Vyara; 3-0; Sat.	Vyara; 3-0	w., rv.	
Udwada; 2-0	Motiwada, 3-0; Tue.	Udwada; 2-0	w.,rv.;t	sl (pr.)
Bulsar; 12-0	Bulsar; 12-0;	Ronvel; 1-0	w.	sl (pr).
		deserted		
Navsari; 10-0	Navsari; 10-0; Sun.	Local;	w.	sl (pr).
Surat; 11-0	Surat; 11-0; Sat.	Olpad; 4-0	w.	sl.;pyt.; fr (Mrg.Sud-11) Siddhanath Mahadev 8tl.; mq.; dg.; 2dh;-ch.; lib.; 2dp.
Surat; 5-0	Surat, 5 0; Sart.	Vesugam; 3-0	w., p.	2tl.; dg.
Kim, 11-0	Kim; 11-0;	Takarma; 0-4	w.	sl (pr).
Umerpada; 5 0	Devgadh; 11-0; Thu.		0.	
Surat; 4 0	Surat; 4-0; Sat.	Local,	w., rv.	pyt.; 2tl.; dg.; dh.
Vedchha; 1 4	Abrama, 2 0;	Abrama, 1-0	w., p.	3tl.; dh.; lib.
Zankhvav; 7-0	Zankhvav; 7-0;	Zankhvav; 7-0	w.	sl (pr).
Bilimora; 17-0	Fadwel; 3-0; Fri.	Fadwel; 3-0	w.	3sl (pr., 2, lokshala).; pyt.; cs (mp).; tl.
Bulsar, 59-0	Varwath; 9-0; Sun.	Dharampur;33-0	p.	
		deserted		
Amalsad,	Local.	Local.	w.	sl (pr).; pyt.; 6tl.; 2 Jain Apasara.; mq.; dg.; dh.; ch.; lib.; 4dp.
Amalsad, 1-0	Sari Bujarang; 1-4,	Amalsad; 1-0	w	sl (pr).; 2tl.; mq.
Bulsar; 4-0	Bulsar; 4-0,	Kapra; 1 0	w.,t.	sl (pr).
Rentlaw, 2-0	Motiwada; 1-4; Tue.	Rentlaw; 2-0	w., t.	sl (pr).
Sayan, 12-0	Surat; 10-0; Sat.	Velook; 1-2	w.	cs (mp).; ch.
Niod, 2-0	Surat; 3-0; Sat	Kumbharia; 0-2	w.	sl (pr).; tl.; dg.; dh.; ch.
Ubhan 6-0	Surat; 6-0; Sat.	Local;	w.	sl (pr).; tl. dh.
Bulsar, 4-0	Bulsar; 4-0;	Bulsar; 4-0	w.	sl (pr).; cs (c).; fr (An Vad 14).; tl.; dg.
Navsari; 10-0	Navsari; 10-0; Sun.	Local;	w.	tl.; dh.
Songadh; 12-0	Songadh; 12-0; Sun.	Songadh; 12-0	w.	pyt.
Umerpada; 9-0	Umerpada; 9-0;		w.	cs.
Bulsar, 56-0	Rajpuri Jungle; 15-0; Thu.	Dharampur;38-0	p.	
Navsari, 13-0	Navsari; 13-0; Sun.	Local;	w.	sl.; pyt.; 2tl.; lib.; dp.
Madhi; 10-0	Mandvi; 4-0; Wed.	Local;	w., p.	sl (pr).; pyt.; cs.; dg; ch.; dp.

Sr. No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati. 1	Direction; Travelling distance from taluka peta H.Q. 2	Area (Sq. miles.); Population.; Households; Agricultural population. 3	Post office; Distance in miles. 4
1601	Satīmāl BNS.; સતીમાલ	S; 16–0	1.8; 512; 107; 512	Bansda; 16-0
1602	Sāvā MGL.; સાવા	W; 10–0	1.6; 381; 82; 75	Kosamba; 4-0
1603	Sayājīgām SGD.; સયાજીગામ	E; 35–0	1.2; 439; 74; 410	Khandbara; 17-0
1604	Sāyaṇ OPD.; સાયણ	E; 9–0	2.7; 2630; 528; 951	Local:
1605	Seḍhāv PLN.; શેઢાવ	SW; 8–0	0.1; 133; 32; 92	Niol; 1-0
1606	Segavā BLR.; સેગવા	E; 8–1	0.9; 529; 90; 529	Atgam; 1-0
1607	Segavā KMJ.; સેગવા	SE; 6–0	2 6; 386; 66; 363	Aste; 1-0
1608	Segavāchāmā OPD.; સેગવાછામા	S; 6–0	2.0; 447; 71; 439	Runder; 4-0
1609	Segavī BLR.; સેગવી	SW; 3–4	1.5; 1115; 180; 502	Bulsar; 4-0
1610	Sejawāḍ BRD.; સેજવાડ	SW; 5–0	3 3; 862; 175; 816	Vakaner; 2-0
1611	Sekhapur KMJ.; શેખપુર	NW; 5–0	2.2; 447; 95; 403	Sayan; 1[illegible]
1612	Sekhapur MHW.; શેખપુર	SE; 2–0	3.8; 1236; 200; 1215	Mahuwa; 1-0
1613	Selārapur MGL.; સેલારપુર	E; 9–0	2.4, 416, 70; 404	Wankal; 4-0
1614	Selavāṇ MGL.; સેલવાણ	E; 44–0	1.2; 161; 26; 148	Umerpada, 10-0
1615	Selazar SGD.; સેલઝર	S; 20–0	1.1. 60; 11; 60	Songadh; 20-0
1616	Selut OPD.; સેલુત	SW., 6–0	1.6; 370; 71; 344	Dihen; 1-0
1617	Śeṇṭhī MGL.; શેંઠી	SW; 8–0	2.7; 340; 65; 327	Velachha; 3-0
1618	Śeraḍi OPD.; શેરડી	S; 6–4	0.6; 455; 73; 427	Variav; 2-0
1619	Śerulā SGD.; શેરુલા	N; 15–0	0.6; 157; 25; 142	Songadh; 15-0
1620	Sevaṇī KMJ.; સેવણી	SE; 9–0	3 3· 1589; 302; 1348	Local;
1621	Sevāsaṇ MHW.; સેવાસણ	E; 5–0	0.7; 94; 19; 90	Supa; 1-0
1622	Sevaṭi SGD.; સેવટી	E; 33–0	0.4; 136; 23; 135	Khandbara, 12-0
1723	Śiker VLD.; શીકેર	NW; 4–0	1.7; 1693; 336; 594	Local:
1624	Siladhā DRP.; સીલધા	S; 25–0	7.8; 1068; 200; 965	Dharampur; 25-0
1625	Silaṭavel SGD.; સીલટવેલ	N; 5–0	1.4; 321; 59; 304	Songadh; 5-0
1626	Sīmāḍā CRS.; સીમાડા	E; 6-4	1.0; 237; 43; 179	Nanavarachha; 0-4
1627	Sīmāḍī KMJ.; સીમાડી	S; 6–2	1.2; 393; 94; 376	Vav; 2-0
1628	Sīmalagām NVR.; સીમલગામ	NW; 10–0	2.0; 1457; 334; 1062	Local;

Railway St.; Distance.	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance.	Drinking water facilities	Institutions and other information.
5	6	7	8	9
Unai; 24-0	Anklach; 2-0; Sat.	Dharampur; 7-0	w., rv.; str.	sl (pr.)
Velachha; 2-0	Velachha; 2-0;		w., p.	sl (pr).
Khand-bara; 17-0	Khand-bara; 17-0; Sun.	Khand-bara; 17-0	w., rv.	
Local;	Surat; 18-0: Sat.	—		3sl (2pr., m).; pyt.; cs.; tl.; 3mq.; dg.; dh.; ch.; dp.
Niol; 0-4	Surat; 4-0; Sat.	Antroli; 2-0	w.	pyt.
Bulsar; 9-0	Bulsar; 9 0;	Kalwada; 0-1	w.	sl (pr).
Ganga-dhara; 8-0	Bardoli; 7 0; Sat.	Local;	w	sl (pr).; pyt.; cs (c).; tl.; lib.; dp.
Surat; 9-0	Surat; 9-0; Sat.	0-6	w.	sl (pr).; cs.; tl.; dg.
Bulsar; 4-0	Bulsar; 4-0;	Bulsar; 3-4	w.	sl (pr).; pyt.; tl.
Madhi; 5-0	Surali; 5 0; Thu.	Vakaner; 2-0	w	sl (pr).; pyt.; tl.; ch.; dp.
Sayan; 1-4	Surat, 10 0; Sat.	1-4	w.	pyt.; cs (c).; tl.; ch.
Bardoli; 10-0	Mahuwa; 1 0; Mon.	Mahuwa; 2-0	w., rv	sl (pr).; pyt.; cs (c).; lib.
Zankhvav; 2-0	Zankhvav, 2 0.	Zankhvav. 2-0	w.	
Umarpada; 10-0	Umerpada; 10 0;		w.	cs.
Songadh; 20-0	Umarda; 1-0; Tue.	Songadh; 20-0	n.	opyt.; ch
Surat; 10 0	Surat. 10 0, Sat	Velook 1 0	w., p.	sl (pr).; cs (c).; fr. (Bdr. sud 14).; 3tl.; dg.; dh.
Velachha; 3-0	Velachha 3 0,	Molvan Limbdi. 4-0	w.	tl., 2dg.
Ubhan. 5-0	Surat. 6-0, Sat.	Variyav, 1-0	w.	sl (pr).; cs (c).; tl.
Songadh; 15 0	Songadh; 15 0, Sun	Songadh; 15 0	w	
Bardoli; 8-0	Bardoli. 8 0; Sat.	Local;	w.	sl(pr); pyt.; cs(c).; 5tl.; ch., lib.; dp.
Navsari; 8-0	Dholikui, 3 0; Sun.	Kurel; 1-0	w., rv.	pyt.
Khandbara; 12-0	Khandbara; 12-0; Sun.	Chinchpada; 9 0	w., rv	pyt.
Bardoli; 9-0	Valod; 4 0; Fri	Siker-Delwada 06	w., t.	sl(m).,Cs.; tl.; dg.; ch.
Bulsar; 43-0	Local; Sat.	Dharampur. 25-0	p.	sl(pr).
Songadh; 5-0	Singpur; 4 0; Mon.	Songadh; 5-0	w.	pyt.
Surat; 4-0	Surat; 6 0; Sat	Nana Varchha. 0-4	w.	sl(pr).; tl.; dg.
Chalthan; 6-0	Bardoli; 9 0; Sat.	Kosmadi; 0-1	w.	pyt.; 3tl.; dh.
Maroli; 4-0	Maroli; 2 4;	Nadod; 3-0	w.	sl(pr).; pyt.; cs.; 2tl.; ch.; lib.

Sr. No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati. 1	Direction; Travelling distance from taluka peta H. Q. 2	Area (sq. miles.); Population Households; Agricultural population. 3	Post office; Distance in miles 4
1629	Simalak NVR.; સીમલક	N; 8–0	1.6; 783; 165; 564	Dabhel; 0-1
1630	Simalathu OPD.; સીમલથુ	E; 13–0	1.4; 463; 55; 314	Kim; 4-0
1631	Sīmodarā MGL.; સીમોદરા	W; 5–0	3.4; 702; 158; 495	Local;
1632	Sinad SGD.; સીનદ	S; 36–0	2.0; 115; 15; 115	Navapur; 18-0
1633	Siṇadhāī BNS.; સીણધાઈ	N; 9–4	3.8; 1746; 309; 1317	Unai; 2-0
1634	Sindhumbar DRP.; સીંધુમ્બર	E! 5–0	3.5; 643; 116; 643	Dharampur; 5-0
1635	Singāḍ BNS.; સીંગાડ	N; 7–0	2.4; 908; 158; 823	Anawal; 4-0
1636	Singalakhāñc SGD.; સીંગલખાંચ	N; 6–0	0.5; 132; 30; 132	Songadh; 6-0
1637	Singalavān SGD.; સીંગલવાણ	NW; 14–0	0.5; 131; 17; 130	Mandvi; 12-0
1638	Singaṇapor CRS; સીંગણપોર	NW; 3–1	1.0; 895; 175; 300	Local;
1639	Singagur SGD.; શીંગપુર	S; 7–0	1.4; 926; 166; 781	Songadh; 7-0
1640	Singāramāl DRP.; સીંગારમાલ	E; 30–4	1 0; 180; 38; 180	Dharampur; 30-4
1641	Singāraṭāṭī DRP.; સીંગારટાટી	S; 40–0	1.2; 127; 22; 127	Dharampur; 40-0
1642	Singod BRD.; સીંગોદ	NE; 8–0	1.9; 1149; 245; 1041	Madhi; 1-0
1643	Singod NVR.; સીંગોદ	E; 8–0	1.1; 334; 69; 299	Ambada; 1-0
1644	Sirasapāḍā SGD.; શીરસપાડા	S; 16–0	0.8; 246; 39; 230	Songadh; 16-0
1645	Sisodrā (Ārak) NVR.; સીસોદ્રા (આરક)	N; 9–0	3.7; 1109; 208; 832	Local;
1646	Sisodrā (Ganeśavāḍ) NVR.; સીસોદ્રા (ગણેશવાડ)	E; 3–0	3.1; 2665; 550; 2162	Local;
1647	Sisor SGD.; સીસોર	NW; 16–0	2.6; 561; 88; 518	Vyara; 9-0
1648	Sisumāl DRP.; સીસુમાલ	E; 22–0	1.0; 269; 66; 117	Dharampur; 22-0
1649	Sītāpur BNS.; સીતાપુર	E; 3–0	1.1; 342; 64; 340	Bansda; 3-0
1650	Sithāṇ OPD.; સિથાણ	E; 7–0	1.2; 751; 1137; 643	Sayan; 1-0
1651	Sithāṇā OPD.; સીથાણા	S; 6–0	0.6, 74, 19; 73	Rander; 4-0
1652	Siwāṇ OPD.; સીવાણ	E; 9–0	1.2; 400; 69, 338	Sayan; 2-0
1653	Siyādā CKL.; સીયાદા	E; 8–0	2.1; 1299; 212; 1223	Fadwel; 2-0
1654	Siyālaj MGL.; સીયાલજ	NE; 15–0	2.6; 858; 175; 671	Kim; 2-0
1655	Siyod PLN.; સીયોદ	N; 4–0	1.1; 514; 114; 466	Puni; 1-0
1655	Soladharā CKL.; સોલધરા	S; 4–4	2.6; 1243; 250; 735	Pipalgabhan; 2-0
1656	Soḷī MDV.; સોળી	N; 10–0	1.8; 55; 8; 45	Zankhvav; 6-0

Railway St.; Distance.	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance.	Drinking water facilities	Institutions and other information.
5	6	7	8	9
Maroli; 4-0	Maroli; 4-0; Sun.	Local;	pl.	sl(pr).; mq.; lib.
Kim; 4-0	Kim; 4-0;	Olva; 1-4	w.	sl(pr).; tl.; ch.;
Local;	Wankal; 11-0; Fri.	Mangrol 5-0	w.	sl(pr).; pyt.; cs.; tl.; dg.; lib.; dp.
Navapur; 18-0	Varsa; 10-0; Wed.	Otta; 2-0	w., rv.	pyt.
Unai; 2-0	Unai; 2-0; Tue.	Unai; 2-0	w., rv.	sl(pr).; pyt.; tl.; mq.; ch.
Bulsar; 23-0	Ukta; 0-2; Sun.	Dharampur; 5-0	rv., w.	sl(pr).; cs(c).
Anawal; 4-0	Moti Valzar; 1-0; Mon.	Moti Valzar; 1-0	w., rv.	2sl(pr., lokshala).; pyt.; cs (fmg).
Songadh; 6-0	Singpur; 4-0; Mon.	Songadh; 6-0	w., n.	pyt., tl.
Songadh; 14-0	Mandvi; 12-0; Wed.	Mandvi; 12-0	w.	sl(pr).; pyt.
Surat; 4-0	Surat; 2-4; Sat.	Local;	w.	sl(m).; tl.; ch.; lib.; dp.
Songadh; 7-0	Local; Mon.	Songadh; 7-0	w.	sl(pr). pyt.; cs.(c.); Gherjatra-Phg. Sud 15 ch.; lib.; dp.
Bulsar; 53-0	Nani Vahiyal 22-0; Thu.	Dharampur; 31-0	p.	
Bulsar; 58-0	Sildha; 9-0; Sat.	Dharampur; 40-0	p.	
Madhi; 1-0	Local; Thu.	Local;	w., t.	sl(pr).; pyt.; tl.; ch.
Navsari; 9-0	Navsari; 9-0; Sun.	Ambada; 1-0	w.	pyt.
Songadh; 16-0	Umarda; 4-0; Tue.	Songadh; 16-0	w.rv.,	pyt.
Maroli; 9-0	Navsari; 10-0; Sun.	Local;	w.	sl(pr).; pyt.; cs.; tl.; ch.; lib.
Navsari; 4-0	Navsari; 4-0; Sun.	Local; ...	w.	2sl(2pr).; pyt.; 2cs (c., mis).; fr(As. Vad 14).; tl.; m.; dh.; ch.
Vyara; 9-0	Satkul; 3-0; Fri.	Vyara; 9-0	w., n.	sl(pr).; pyt.; ch
Bulsar; 40-0	Rajpuri Jungle 7-0; Thu.	Dharampur; 22-0	str., p.	
Unai; 10-0	Bansda; 3-0; Fri	Bansda; 3-0	w., rv.	
Sayan; 1-0	Surat; 14-0; Sat.	Sandhier; 2-0	w.	sl (pr).; pyt.; tl.; lib.; 2dp.
Surat; 10-0	Surat; 10-0; Sat.	Segavachhma; 1-0	w.	cs.; tl.
Sayan; 2-0	Surat; 10-0; Sat.	Sayan; 1-4	w.	sl (pr).; tl.; dg.
Rankuwa; 6-0	Fadwel; 2-0; Fri.	Local;	w., rv.	sl (pr).; pyt.; 3tl.; dg.
Kim, 2-0	Kim; 2-0;	Kim; 2-0	w., rv.	sl (pr)., pyt.; cs (mis).; fr (Ganjpir's; Ct. Sud 2).; 2tl.;) mq.; dg.
Chilthan; 11-0	Sarbhan; 3-0;	Sarbhan; 3-0	w.	s.l (pr).; 4tl.
Bilimora; 10-0	Vad; 3-0; Wed.	Chikhali; 4-4	w.	sl (pr).; pyt.; tl.
Zankhvav; 8-0	Devgadh; 2-0; Thu.	Devgadh; 1-0	w.	cs.

Sr. No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati. 1	Direction; Travelling distance from taluka/peta H.Q. 2	Area (sq. miles.); Population; Households; Agricultural population. 3	Post office; Distance in miles 4
1658	Sonagadh SGD.; સોનગઢ	Head-quarters	1.0; 2858; 964; 278	Local;
1659	Sonandar DRP.; સોનંદર	E; 28–0	3.2; 225; 52; 225	Dharampur; 28-0
1660	Sonārapāḍā SGD.; સોનારપાડા	W; 2–0	2.0; 83; 18; 65	Songadh; 2-0
1661	Sonārī CRS.; સોનારી	S; 7–0	0.5; 56; 17; 56	Bhestan; 0-6
1662	Sonatalāv CRS.; સોનતલાવ	S;	......................deserted	....
1663	Sonawāḍā BLR.; સોનવાડા	E; 8-0	2.3; 990; 217; 649	Dungri; 2-0
1664	Sonawāḍā PRD.; સે.નવાડા	E; 5-0	2.6; 1404; 254; 1327	Local
1665	Sonawāḍī GND.; સોનવાડી	N. 4-0	0.7; 1268; 276; 760	Local
1666	Sondalā-Khārā OPD.; સોંદલા ખારા	NW; 3–2	3.7; 432; 97; 381	Olpad; 3-2
1667	Sondā-Mīṭhā OPD.; સોંદા મીઠા	E; 3–0	1.9; 310; 55; 285	Olpad; 4-0
1668	Soṇḍhalawāḍā PRD.; સોંઢલવાડા	E; 3–4	2.2; 829; 160; 810	Pardi; 5-0
1669	Sondhaṇ OPD.; સોંધણ	N; 6–0	0.9; ....deserted	....
1670	Sonsak OPD.; સોંસક	N; 5–0	0.4; 703; 146; 647	Local;
1671	Soyāṇī PLN.; સોયાણી	E; 7–0	1.0; 819; 137; 770	Gangadhara; 1-0
1672	Srāvaṇiā SGD.; શ્રાવણીઆ	S; 18–0	3.6; 217; 37; 217	Songadh; 18-0
1673	Sukalabārī DRP. સુકલબારી	S; 23–0	0.5; 83; 15; 83	Dharampur; 22-0
1674	Sukhābārī BNS.; સુખાબારી	W; 8–0	2.0; 605; 123; 602	Bansda; 8-4
1675	Sukhālā DRP.; સુખાલા		1.3; 1469; 240; 1469	Local;
1676	Sukhalāv PRD.; સુખલાવ	W; 1–4	2.0; 892; 163; 891	Pardi; 2-0
1677	Sukheś PRD.; સુખેશ	E; 4–0	3.4; 1900; 338; 1645	Pardi; 4-0
1678	Sulatānapor NVR.; સુલતાનપોર	W; 11–0	4.9; 1913; 430; 962	Local;
1679	Sulatānābad CRS.; સુલતાનાબાદ	SW; 12–0	1.7; 872; 181; 287	Local:
1680	Sulatānapur OPD.; સુલતાનપુર	NE; 5–0	0.8; ....deserted ...	....
1681	Suḷīā DRP.; સુળીઆ	S; 50–0	2.9; 550; 112; 550	Dharampur; 50-0
1682	Suṇṭhawāḍ CKL.; સુંઠવાડ	N; 6–0	1.3; 498; 90; 497	Chasa; 1-0
1683	Supā (Kurel) NVR.; સુપા (કુરેલ)	N; 9–0	1.3; 1258; 221; 614	Local;

Railway St.; Distance.	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance.	Drinking water facilities	Institutions and other information.
5	6	7	8	9
Local;	Local; Sun.	Local;	w.; pl.	3sl (2pr., m).; pyt,; cs.; fr (Ct. Sud 15., Vak. Sud 15).; 10tl.; M.; mq.; dg.; dh.; gym.; ch.; lib.; dp. Historical fort.
Bulsar; 39-0	Rajpuri Jungle 5 0; Fri.	Dharampur; 28-0	rv., p.	
Songadh; 2-0	Songadh; 2-0; Sun.	Songadh; 2-0	w.	
Bhestan; 0-6	Surat; 6-0; Sat.	Bhestan; 0-4	0.	tl.
....	....	deserted	....	....
Dungri; 2-0	Dungri; 2 0;	Vaghaldhara; 2-4	w., t.	3sl (3pr).; 2tl.; dg.
Pardi; 5-0	Sukhalav; 1-0; Fri.	Rampor; 2-0	w.	sl (pr).; pyt.; tl.
Amalsad; 4-0	Sari Bujarang 3 0;	Gadat; 0-4		sl (pr).; pyt.; fr (Mg. Vad 14).; tl.; mq.
Sayan; 12-0	Surat; 15 0; Sat.	Local;	w.	sl (pr).; cs. (c).; 2tl.; dg.
Sayan; 10-0	Surat; 15-0; Sat.	Takarma; 1-4	w.	sl (pr).; tl.; dh.
Pardi; 5-0	Sukhlav; 4-0; Fri.	Pardi; 3 4	w.	sl (pr).; cs (c).; tl.; dh.
....	....	deserted	....	....
Surat; 8 0	Surat; 8 0; Sat.	Talat; 1-0	w.	sl (pr).; cs (mp).; tl.; lib.
Gabgadhara; 1-0	Gangadhara; 1 0;	Bardoli; 5-0	w.	sl (pr.).; pyt.; tl.; lib.
Songadh; 18 0	Songadh; 18-0; Sun.	Songadh; 18-0	rv.	sl (lokshala).
Bulsar; 40-0	Sildha; 5 0; Sat.		p.	
Anaval; 8-0	Limzar; 20, Sun.	Pratapnagar; 7 0	w.,str.	sl (pr).; tl.; ch.
Vapi; 8 0	Local; Fri.	Nanapondha; 6-0	w., p.	sl (pr).
Pardi; 3-4	Local; Fri.	Pardi; 1-4	w.	sl (pr.).; pyt.
Pardi; 4-0	Sukhlav; 1-0; Fri.	Pardi; 4-0		sl (pr).; pyt.; cs (c).; tl.; gym.
Vedchha; 3-0	Abrama; 3-0;	Abrama; 2-0	w., p.	4sl (2pr.; 2m).; pyt.; tl.; dh.; ch.; dp.;
Surat; 12-0	Surat; 12-0; Sat.	Local;	w.	sl (pr).; 3tl.; M.; 2mq.; dp. The palace of Nawab of Sachin.
....	....	...deserted	....	....
Bulsar 68-0	Ozar; 2-4	Dharampur 50-0	rv.,p., n.	sl(pr).
Chikhali Road. 2-4	Chikhali 6-0	(i) Chikhali Road. 2-2 (ii) Degam 2-0	w., rv.	sl(pr).; dg.
Bardoli 4-0	Navsari 10-0 Sun.	Local	w.	cs.; tl.; ch.; lib.

Sr. No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati. 1	Direction; Travelling distance from taluka/peta H. Q. 2	Area (sq. miles); Population; Households; Agricultural population. 3	Post office; Distance in miles. 4
1684	Surakhāī CKL.; સુરખાઈ	E; 8-0	2.1; 1129; 196; 1001	Local;
1685	Surālī BRD.; સુરાલી	E; 10-0	4.3; 2236; 415; 1620	Madhi; 1-0
1686	Surālī MGL.; સુરાલી	W; 5-0	1.9; 196; 31; 184	Simodra; 2-0
1687	Surat CRS.; સુરત	Head-quarters	3.0; 2,23,182; 41,555; 1947	Local;
1688	Surawāḍā BLR.; સુરવાડા	SW; 4-0	0.6; 778; 116; 494	Bulsar; 5-0
1689	Suthārapāḍā DRP.; સુથારપાડા	SE; 36-0	0.5; 132; 25; 132	Penda; 15-0
1690	Suwālī CRS.; સુવાલી	W; 15-0	12.7; 2512; 622; 1645	Local;
1691	Syādalā OPD.; સ્યાદલા	E; 9-0	2.0; 554; 104; 501	Local;
1692	Syādalā VLD.; સ્યાદલા	N; 6-0	1.3; 1036; 203; 870	Local;
1693	Taḍakēśwar MDV.; તડકેશ્વર	W; 18-3	13.4; 3954; 728; 3004	Local;
1694	Tāḍakuvā VRA. તાડકુવા;	NE; 2-0	1.8; 540; 122; 497	Vyara; 2-0
1695	Tāḍapāḍā BNS.; તાડપાડા	E; 6-0	2.0; 175; 40; 175	Banada; 6-0
1696	Tājapor (Bujrag) BRD.; તાજપોર (બુજરગ)	SW; 3-0	1.7 283; 56; 262	Sarbhan; 1-0
1697	Tājapor (Khurad) BRD.; તાજપોર (ખુરદ)	E; 1-4	0.4; ....deserted	....
1698	Tājapor Vālod RD.; તાજપોર (વાલોદ)	E; 2-0	0.5; ....deserted	....
1699	Ṭakāramā OPD.; ટકારમા	NE; 5-4	2.2; 556; 108; 545	Olpad; 4-0
1700	Takiā Āmbā VRA.; તકીઆઆંબા	S; 22-0	5.3; 732; 101; 696	Dolvan; 5-0
1701	Taḷād OPD.; તળાદ	S; 4-4	0.9; 337; 70; 267	Variav; 4-0
1702	Talaṅgapur CRS.; તલંગપુર	S; 10-0	2.3; 1276; 255; 1070	Local;
1703	Talāvacorā CKL.; તલાવચોરા	S; 2-4	3.5; 2439; 444; 1641	Local;
1704	Taḷodarā PLN.; તળોદરા	NW; 4-0	0.1; 246; 44; 209	Chalthan; 1-4
1705	Tāmachaḍī DRP.; તામછડી	E; 15-0	4.7; 285; 51; 252	Dharampur; 15-0
1706	Taṇachīā DRP.; તણછીઆ	NE; 25-0	0.5; 92; 18; 92	Dharampur; 25-0
1707	Ṭāṅkal CKL.; ટાંકલ	NE; 8-0	3.0; 1621; 320; 1590	Local;
1708	Ṭāṅkī DRP.; ટાંકી	S; 5-0	0.2; 213; 39; 213	Dharampur; 5-0
1709	Ṭaṅkolī NVR.; ટંકોલી	NW; 3-4	0.7; 202; 48; 179	Kasbapar; 1-0
1710	Tāntīthaiyā PLN.; તાંતીથૈયા	N; 6-0	1.1; 320; 69; 303	Degamra; [illegible]

Railway St.; Distance.	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance.	Drinking water facilities	Institutions and other information.
5	6	7	8	9
Rankuva; 1–4	Chapaldhara; 4–0 Sat.	Local;	w.	2sl(2pr).; pyt.; tl,; mq.
Madhi; 1–0	Local; Thu.	Local;	w.,rv.	Sl(pr).; pyt.; ch.
Simodra; 2–0	Mangrol; 5–0	Tadkeshwar;3–0	w.,n.	dg.
Local;	Local Sat.	Local;		Refer "Places of Interest"—Chapter 20.
Bulsar; 5–0	Bulsar; 5–0	Bulsar; 4–0	w.	2sl(2pr).
Bulsar: 50–0	Huda; 4–0 Tue.	Penth; 10–0	w.	
Surat; 16–0	Surat; 16–0 Sat.	Local;	w.	2sl(2pr).; pyt.; 3tl.; ch.; dp.
Kim; 3–0	Kim; 4–0	Kim; 4–0	w.	sl(pr).; pyt.; 3tl.; dh.; ch..
Madhi; 2–0	Surali; 1–0 Thu.	Local;	w.	sl(pr).; pyt.; tl.; ch.; lib.
Kim; 9–0	Kim; 9–0	Local ;	w.,p.	sl(pr).; pyt.; tl.; 3mq.; 2dg.; ch,; lib.; 3dp.
Vyara; 2–0	Vyara; 2–0 Sat.	Vyara; 2–0	w.,rv.	sl(pr).
Vaghai; 3–0	Khambla; 2–0 Tue.	Local;	w.,rv.	
Bardoli 5–0	Mahuwa; 4–0 Mon.	Goji; 0–2	w.	sl(pr).; tl.
....	....	.. deserted	....	....
....	....	...deserted	....	....
Surat; 16–0	Surat; 16–0 Sat.	Local;	w.	sl(pr).; pyt.; cs(mis).; 2tl.; dg.; dh.; ch.; lib.; dp.
Unai; 7–0	Panchol; 6–0 Fri.	Dolvan; 5–0	w.	sl (lokshala).
Ubhan; 7–0	Surat; 7–0 Sat.	Local;	w.	sl(pr).; 2cs(c.,mis).; tl; dg.; ch.
Sachin; 2–0	Surat; 10–0 Sat.	Sachin; 2–0	w.	sl(pr.) 6tl.; dh.; lib.
Bilimora; 8–0	Chikhali 2–0	Chikhali; 2–4	w.,t.	sl(pr).; pyt.; 2cs. (2mis).; tl.; dh.; ch.
Chalthan; 1–4	Chalthan; 1–0	Chalthan; 1–4	w.	sl(pr).; pyt.; tl.; lib.
Bulsar; 33–0	Nani Vahiyal; 10–0 Thu.	Dharampur;15–0	rv.,p.	sl(pr).
Bulsar; 43–0	Bopi; 6–0 Fri.	Dharampur;25–0	rv.	
Rankuwa; 3–0	Kangwai; 3–0 Fri.	Local;	w.	sl(pr).; pyt.; cs(c).; tl.; lib.; dp.
Bulsar; 20–0	Dharampur; 5–0 Mon.	Dharampur;5–0	p.	
Navsari; 2–0	Navsari; 3–4 Sun.	Navsari; 2–0	w.	sl (Urdu Madressa).; mq.
Local;	Chalthan; 1–0	Chalthan: 1–0	w.	sl(pr).; pyt.; 2tl.; ch.; lib.

Sr. No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati. 1	Direction; Travelling distance. from taluka/ peta H. Q. 2	Area (sq. miles.); Population; Households; Agricultural population. 3	Post office; Distance in miles. 4
1711	Tāntizagaḍā PLN.; તાંતીઝગડા	NW; 2–4	0.1; 346; 70; 325	Baleshwar; 1-0
1712	Ṭāparavāḍā SGD.; ટાપરવાડા	S; 15–0	1.3; 383; 60; 362	Songadh; 15-0
1713	Tarabhāṇ BRD.; તરભાણ	S; 9–3	2.0; 1042; 209; 955	Sarbhan; 3-0
1714	Tarāj CRS.; તરાજ	SE; 12–0	1.3; 620; 126; 538	Palsana; 2-0
1715	Tarakapāraḍi PRD.; તરકપારડી	SW; 10–2	0.2; 140; 32; 80	Vatak; 1-0
1716	Tarakārī MHW.; તરકારી	S; 18–0	1.9; 534; 65; 484	Anaval; 0-4
1717	Taramāliā PRD.; તરમાલીઆ	NW; 5–0	1.4; 942; 152; 927	Paria; 2-0
1718	Tārāpor MDV.; તારાપોર	NE; 9–0	1.2; 163; 27; 155	Mandvi; 9-0
1719	Tarasāḍā-Bāragāmā MDV.; તરસાડા બારગામા	S; 0–2	1.6; 750; 174; 600	Local;
1720	Tarasāḍā-Khurad MDV.; તરસાડા ખુર્દ	N; 4–0	0.8; 441; 83; 429	Mandvi; 4-0
1721	Tarasāḍi MHW.; તરસાડી	E; 3–0	2.1; 100; 23; 94	Nizar; 2-0
1722	Tarasāḍī NVR.; તલસાડી	E; 7–0	9.5; 330; 68; 312	Munsad; 3-0
1723	Tarasāḍi MGL.; તરસાડી	W; 16–0	2.5; 1120; 248; 515	Kosamba; 0-4
1724	Tarasāḍī SGL.; તરસાડી	S; 7–0	1.3; 305; 56; 292	Songadh; 7-0
1725	Tavaḍī NVR.; તવડી	NW; 1–4	2.0; 1552; 338; 597	Local;
1726	Ṭāval MGL.; ટાવલ	E; 37–0	0.3; 57; 9; 57	Umerpada; 8-0
1727	Ṭāvali SGD.; ટાવલી	E; 36–0	0.1; 50; 11; 49	Khandbara; 14-0
1728	Tējalāv CKL.; તેજલાવ	S; 14–0	1.4; 941; 209; 762	Pipalgabhan; 5-0
1729	Tēlāḍā NVR.; તેલાડા	NE; 7–0	1.1; 432; 82; 220	Veshma; 4-0
1730	Ṭēmakā SGD.; ટેમકા	S; 14–0	0.9; 113; 21; 113	Songadh; 14-0
1731	Ten BRD.; તેન	W; 2–0	4 0; 373; 82; 341	Bardoli; 1-4
1732	Tēnā OPD.; તેના	SW; 10–0	2.9; 579; 124; 558	Pinjrat; 2-0
1733	Tericikhali DRP.; તેરીચીખલી	S; 45–0	3.8; 439; 81; 439	Dharampur; 45-0
1734	Thālā CKL.; થાલા	N; 1–0	1.2; 1196; 244; 507	Chikhali; 0-4
1735	Thāroli KMJ.; થારોલી	NW; 3–0	1.2; 60; 12; 54	Kathor; 3-0
1736	Ṭhoṭhab OPD., ઠોઠબ	N; 5–4	0.8; 67; 12; 67	Olpad; 8 0
1737	Ṭicakapurā VRA.; ટીચકપુરા	W; 3–0	1.8; 318; 52; 315	Vyara; 3-0
1738	Ṭicakiā SGD.; ટીચકીઆ	SW; 13–0	0.6; 208; 34; 208	Vyara; 4-0
1739	Tigharā BLR.; તીઘરા	NE; 10–0	1.5; 727; 144; 727	Gorgam; 1-0
1740	Tigharā NVR.; તીઘરા	SE; 2–0	0.7; 574; 124; 194	Kaliawadi; 1-0
1741	Tigharā PLN.: તીઘરા	......	........................deserted	....
1742	Tigharā PRD.; તીઘરા	S; 6–0	1.3; 788; 159; 585	Udwada; 2-0
1743	Tigharā VLD.; તીઘરા	SW; 3–4	........................deserted	....

Railway St.; Distance.	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance.	Drinking water facilities	Institutions and other information.
5	6	7	8	9
Chalthan; 3-2	Baleshwar; 1-0	Baleshwar; 1-0	w.	pyt.; cs(c).; tl.
Songadh; 15-0	Umarda; 2-0 Tue.	Songadh; 15-0	w.,rv.	sl (lokshala).; pyt.; ch.
Bardoli; 9-0		Pardi; 1-0	w.	sl(pr).; 2tl.; ch.; lib.
Chalthan; 4-0	Palsana; 2-4	Palsana; 2-4	w.	sl(pr).; tl.; mq.; ch.
Udwada; 5-0	Udwada; 5-0 Tue.	Bagewada; 5-0	w.	
Anavals; 0-4	Anaval; 0-4 Wed.	Anaval; 0-4	w.,t.	pyt.
Udwada; 3-0	Udwada; 3-0 Tue.	Paria; 2-4	w.	sl(pr).; cs(mp).
Zankhvav; 10-0	Devgadh; 1-4 Thu.	Devgadh; 1-4	w.	sl(pr).
Madhi; 8-0	Mandvi; 0-2 Wed.	Local;	w.,rv.	sl(pr).; cs.; 3tl.; dg.; dh.; liv; dp.
Zankhvav; 11-0	Mandvi; 4-0 Wed.	Mandvi; 4-0	w.	sl.(pr).
Bardoli; 4-0	Mahuwa; 4-0 Mon.	Sarbhan; 2-0	w.	pyt.; tl.
Navsari; 8-4	Navsari; 8-4 Sun.	Local;	rv.,w.	sl(pr).; tl.; lib.
Kosamba; 0-4	Kosamba; 0-4	Kosamba; 0-4	w.,p.	sl(pr).; pyt.; 2tl,; dh. ch.
Songadh; 7-0	Bandharpada Mota 2-0 Mon.	Songadh; 7-0	w.	sl (lokshala).
Navsari; 1-4	Navsari; 1-0 Sun.	Navsari; 1-4	w.	sl(pr).; pyt.; 2tl.; dh,; ch.; lib.; dp.
Umerpada; 8-0	Umerpada; 8-0		w.	cs.
Khandbara 14-0	Ranku Talav; 5-0 Fri.		—.	
Bilimora; 10-0	Randha; 10-0 Wed.	Chikhali; 4-0	w.	sl(pr).; cs(c).; tl,; dh.; dp.
Navsari; 7-0	Navsari; 6-0 Sun.	Local;	w.	sl(pr).; mq ; dg.; ch.
Songadh; 14-0	Umarda; 2-0 Tue.	Songadh; 14-0	w.,rv.	pyt.
Bardoli; 1-0		Bardoli; 1-4	w.	pyt.; 2tl,; ch.
Surat; 14-0	Surat; 13-0 Sat.	Dihen; 1-0	w.	sl(pr).; 2tl.
Bulsar; 63-0	Ozar; 10-0 Thu.	Dharampur 45-0	rv.,n.	
Bilimora; 0-6	Chikhali; 0-4	Chikhali; 0-4	w.	sl(pr).; pyt.; mq.; 2dg.
Sayan; 4-4	Surat; 7-0 Sat.	Kathor, 2-0	w.	cs(mis).; dg.
Kim; 11-0	Kim; 11-0	Takarma; 3-0	w.	
Vyara; 3-0	Vyara; 3-0 Sat.	Local.	w.	pyt.
Vyara; 4-0	Vyara; 4-0 Sat.	Vyara; 4-0	w.,rv.	sl(pr).; pyt.
Dungri; 4-0	Dungri; 2-0	Vaghala-dhara; 2-4	w.	sl(pr).; tl.; mq.
Navsari; 3-0	Navsari; 3-0 Sun.	Navsari; 2-0	w.	sl(pr).
....	....	...deserted	....	....
Udwada; 2-0	Udwada; 2-0 Tue.	Local;	w.,t.	3sl(pr.,m.,h).; cs(c).
....	....	...deserted	....	....

Sr. No.	Village or Town name in English; Taluka abbreviation Village or Town name in Gujarati. 1	Direction; Travelling distance from taluka/peta H. Q. 2	Area (sq. miles); Population; Households; Agricultural population. 3	Post office; Distance in miles. 4
1744	Ṭimbar KMJ.; ટીમ્બર	E; 10-0	4.0; 1104; 206; 970	Local;
1745	Ṭimbaravā BRD.; ટીંબરવા	NE; 5-0	2.4; 732; 154; 449	Akoti; 2-4
1746	Ṭimbaravā CRS.; ટીંબરવા	E; 10-0	1.3; 309; 68; 279	Mohni; 1-0
1747	Ṭimbaravā MGL.; ટીંબરવા	NE; 3-0	1.4; 283; 57; 278	Mangrol; 3-0
1748	Ṭiskari-Jangal DKP.; ટીસ્કરી-જંગલ	S; 30-0	2.9; 349; 79; 349	Dharampur; 30-0
1749	Ṭisakari-Talāṭ DRP.; ટીસ્કરી-તલાટ	S; 4-0	1.2; 1871; 397; 1760	Dharampur; 4-0
1750	Titawā VLD.; તીતવા	N; 4-4	2.5; 423; 91; 384	Syadla; 1-0
1751	Tithal BLR.; તિથલ	W; 3-0	0.9; 1075; 199; 462	Bulsar; 3-0
1752	Ṭiṭoi MDV.; ટીટોઈ	NW; 8-0	2.5; 574; 111; 570	Mandvi; 8-0
1753	Ṭiṭumāḷ DRP. ટીટુમાળ	S; 50-0	1.2; 174; 32; 174	Dharampur; 50-0
1754	Ṭiṭukhaḍāk DRP.; ટીટુખડક	E; 9-0	1.2; 89; 17; 89	Dharampur; 9-0
1755	Togāpor MDV.; તોગાપોર	W; 16-0	2.3; 206; 42; 206	Bodhan; 3-0
1756	Ṭokarapaḍā DRP.; ટોકરપાડા	SE; 28-0	0.3; 176; 40; 176	Dharampur; 28-0
1757	Ṭokaravā SGD.; ટોકરવા	S; 5-0	2.8; 1207; 188; 1063	Songadh; 5-0
1758	Ṭokaravā VLD.; ટોકરવા	NE; 2-4	1.0; 37; 6; 24	Kamalchhod; 1-4
1759	Ṭokaravā-Nesu SGD.; ટોકરવાનેસુ	SE; 20-0	1.3; 260; 49; 259	Navapur; 20-0
1760	Ṭolī NVR.; ટોલી	SE; 9-0	1.3; 689; 145; 653	Ambada; 1-0
1761	Toraṇagām GND.; તોરણગામ	W; 1-0	0.8; 1143; 225; 909	Gandevi; 1-0
1762	Toraṇaverā CKL. તોરણવેરા	SE; 15-0	3.2; 895; 134; 895	Dharampur; 8-0
1763	Ṭukawāḍā DRP.; ટુકવાડા	S; 45-0	0.5; 378; 76; 378	Vapi; 35-0
1764	Tukawāḍā PRD.; તુકવાડા	S; 7-0	3.1; 1942; 366; 1640	Udwada; 4-0
1765	Ṭukawāḍā MDV.; ટુકવાડા	W; 14-5	0.7; 4; 1; 4	Bodhan; 1-0
1766	Ṭukeḍ MDV.; ટુકેડ	W; 12-0	4-1 1119; 203; 1111	Mandvi; 12-0
1767	Tumbī DRP.; તુંબી	S; 6-0	1.6; 602; 107; 602	Dharampur; 6-0
1768	Tuṇḍi PLN.; તુંડી	NE; 4-5	3.0; 1093; 206; 905	Local;
1769	Ṭunki CRS. ટુંકી	NW; 1-2	0.8; 434; 108; 107	Singanpore; 0-4
1770	Tutarakheḍ DRP.; તુતરખેડ	E; 37-0	2.3; 194; 38; 194	Dharampur; 37-0

Railway St.; Distance.	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance.	Drinking water facilities	Institutions and other information.
5	6	7	8	9
Bardoli; 8-0	Bardoli; 8-0 Sat.	Local;	w.	sl(pr).; pyt.; fr (Ct. Sud 15).; 3t.; mq,; dg.; dh.; ch.; lb.; Galateshwar Mahadev Temple.
Local;	Surali; 5-0 Thu.	Rayam; 1-4	w.	sl(pr),; pyt,; tl,; 2dg,; ch.; lib.; dp.
Chalthan; 3-0	Chalthan; 3-0	Chalthan; 2-0	w.	sl(pr).; 3tl.
Mangrol; 2-0	Mangrol; 3-0	Mangrol; 3-0	w.,P.	pyt; cs(c).; ch.
Bulsar; 48-0	Siladha; 5-0 Sat.	Dharampur;30-0	w.	sl(pr).
Bulsar; 22-0	Dharampur; 4-0 Mon.	Dharampur; 4-0	w.,P.	sl(pr).; tl.
Madhi; 3-0	Surali; 2-4 Thu.	Local;	w.	sl(pr).; cs(mis).
Bulsar; 3-0	Bulsar; 3-0	Bulsar; 3-0	w.	sl(pr);.pyt.; fr(Vad 15-Every Somvati Amavasya).; tl; ch.; lib.
Madhi; 15-0	Amba. 2-0 Sat.	Godsamba; 4-0	w.	sl (lokshala).; cs.s
Bulsar; 68-0	Ozar, 3-4	Dharampur; 50-0	rv.,n.	
Bulsar; 27-0	Ukta; 3-0 Sun.	Dharampur,8-0	rv.	
Kim; 13-0	Bodhan; 3-0 Mon.	Usked; 0-2	w.,n.	
Bulsar; 46-0	Huda; 17-0 Tue.	Penth; 12-0	rv.,P.	
Songadh; 5-0	Songadh; 5-0 Sun.	Songadh; 5-0	w.	sl(pr).; pyt,; cs(c).; fr (Vsk. Sud 9).
Madhi; 5-0	Kamalchhod; 1-4 Sun.	Kamalchhod, 1-0	w.	
Navapur; 20-0	Navapur; 20-0 Sat.	Navapur; 20-0	rv.	sl (lokshala).; pyt.
Navsari; 9-0	Navsari; 9-0 Sun.	Ugat; 2-0	w.,p.	sl(pr).; tl.; lib.
Gandevi; 1-0	Gandevi; 1-0 Wed.	Gandevi; 1-0	w.,t.	sl(pr).; pyt.; 2tl. (Mangoes—chief product.)
Bulsar; 26-0	Dharampur; 8-0 Mon.	Khergam; 7-0	w.	sl(pr).; pyt.
Vapi; 35-0	Ozar; 9-0 Thu.	Vapi, 35-0	rv.,P.,n.	sl(pr).
Udwada; 4-0	Udwada. 4-0 Tue.	Local;	w.,rv.t.	sl(pr).; pyt.; tl.
Kim; 15-0	Bodhan; 1-0 Mon.	Bodhan; 1-0	rv.	2dg.
Kim; 22-0	Amba; 5-0 Sat.	Areth; 4-0	w.	2sl(2pr)l; pyt.; cs(c).
Bulsar; 19-0	Dharampur; 6-0 Mon.	Dharampur; 6-0	p.	sl(pr).
Gangadhra; 2-0	Gangadhra; 2-0	Ena; 1-4	w.	sl(pr); pyt.; cs(c); tl.; ch.
Surat; 2-0	Surat; 2-0 Sat.	Local;	w.,pl.	fr (Kt. Sud 1., An. Sud 8-10); tl; dg.
Bulsar; 55-0	Rajpuri; 15-0 Thu. Jungle.	Dharampur 37-0	p.	sl(pr).

Serial No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati. 1	Direction; Travelling distance from taluka/peta H. Q. 2	Area (Sq. miles); Population; Households; Agricultural population. 3	Post office; Distance in miles. 4
1771	Ubhel KMJ.; ઉભેલ	S; 7–0	3.2; 1356; 383; 1136	Local;
1772	Ucharel BRD.; ઉછરેલ	E; 9–0	1.3; 467; 90; 442	Kadod; 1-0
1773	Udawāḍā PRD.; ઉદવાડા	W; 6–0	2.3; 3956; 872 ; 500	Local;
1774	Udhanā CRS.; ઉધના	S; 3–2	2.6; 2594; 573; 434	Local;
1775	Ugat NVR.; ઊગત	E; 10–4	2.5; 1202; 250; 1121	Local;
1776	Ukai SGD.; ઉકાઈ	N; 6–0	1.9; 182; 33; 122	Songadh; 6-0
1777	Ukatā DRP.; ઉકતા	E; 6–0	3.9; 771; 141; 771	Dharampur; 6-0
1778	Ukhaladā SGC.; ઉખલદા	NW; 7–0	2.8; 872; 152; 848	Songadh; 7-0
1779	Ulasapeṇḍhi DRP.; ઉલસપેંઢી	E; 18–0	1.8; 51; 9; 51	Dharampur; 18-0
1780	Umalī DRP.; ઉમલી	S; 31–0	0.6; 80; 17; 80	Dharampur; 31-0
1781	Umarā CRS.; ઉમરા	W; 2–0	1.5; 2021; 437; 804	Local;
1782	Umarā MHW.; ઉમરા	S; 13–0	6.2; 1629; 298; 1531	Anaval; 5-0
1783	Umarā OPD.; ઉમરા	E; 12–0	1.6; 788; 156; 741	Sayan; 1-0
1784	Umarāchi OPD.; ઉમરાછી	NE; 11–0	2.1; 582; 105; 556	Kim; 6-0
1785	Umaradā SGD.; ઉમરેદા	S; 14 0	1.5; 140; 26; 132	Songadh; 14-0
1786	Umaragoṭ MGL.; ઉમરગોટ	E; 34–0	1.1; 352; 57; 325	Umerapada; 3-0
1787	Umarakach VRA.; ઉમરકછ	SE; 10–0	1 5; 589; 120; 586	Buhari; 1-0
1788	Umarākh BRD.; ઉમરાખ	N; 3 0	4 8; 821; 150; 765	Bardoli; 2-0
1789	Umarakhadī MD.V; ઉમરખડી	N; 4-0	0 9, 173; 35; 173	Mandvi; 4-0
1790	Umarakhāḍi MGL.; ઉમરખાડી	E; 18–0	1.5; 360; 60; 347	Wankal; 11-0
1791	Umarakui BNS.; ઉમરકુઈ	S; 5–4	2.1; 958 ; 190; 907	Bansda; 5-4
1792	Umarakui VRA.; ઉમરકુઈ	SW; 7–0	1.3; 492; 85; 476	Buhari; 4-0
1793	Umarakuvā V.RA; ઉમરકુવા	N; 8–0	1.0; 295; 51; 291	Vyara; 8-0
1794	Umarakuvā (Dūr) VRA.; ઉમરકુવા (દૂર)	SE; 22–0	3.0; 969; 58; 934	Unai; 1-0
1795	Umarakuvā (Najīk) VRA.; ઉમરકુવા (નજીક)	S; 10–0	2.8; 931; 168; 924	Buhari; 4-0
1796	Umarapāḍā DRP.; ઉમરપાડા	S; 55–0	0.5; 77; 18; 77	Dharampur; 55-0
1797	Umarapāḍā MGL.; ઉમરપાડા	E; 25–0	1.9; 232; 39; 214	Local;
1798	Umarasāḍī BRL.; ઉમરસાડી	E; 12–4	0.7; 398; 81; 394	Dungri; 2-0

Railway St.; Distance.	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance.	Drinking water facilities	Institutions and other information.
5	6	7	8	9
Chalthan; 2-4	Chalthan; 2-4	Local;	w.,t.	pyt.; 2cs.; (c.; mis).; 2tl ch.; lib.
Timberva; 4-0	Kodad; 1-0 Sun.	Local;	w.	sl (pr).; tl.; ch.
Local;	Local; Tue.	Local;	w.	5sl (pr., 3m., h).; pyt.; 2tl.; dg.; dh.; gym.; ch.; 2lib.; 2dp.; Parsi fire temple.
Local;	Surat; 2-4 Sat.	Local;	w.	sl (pr).; pyt.; fr (Mrg).; tl.; dh.; ch.
Navsari; 11-0	Navsari; 10-0 Sun.	Local;	w.,p.	sl (pr).; pyt.; ch.; tl.; dg.; lib.; dp.
Songadh; 6-0	Singpur; 4-0 Mon.	Songadh; 6-0	rv.,w.	pyt.
Bulsar; 24-0	Local; Sun.	Dharampur; 6-0	rv.	sl (pr).; cs.; (c).
Songadh; 7-0	Songadh: 7-0 Sun.	Songadh; 7-0	w.,rv.	sl (pr).; pyt.; ch.
Bulsar: 36-0	Rajpuri Jungle; 10-0 Thu.	Dharampur:18-0.	p.	
Bulsar; 49-0	Siladha; 6-0 Sat.	Dharampur;31-0	p.	
Surat: 3-0	Surat; 2-4 Sat.	Local	w.,rv.	sl (pr).; pyt.; fr (Ps.; sud11).; 3tl.; dg.; dh.i lib.;
Anaval; 5-0	Valvad; 2-0 Sun.	Local.	w.,rv.	sl (pr).; pyt.; cs.; (mp).; ch.; lib.;
Sayan; 1-0	Surat; 8-0 Sat.	Sayan, 1-4	w.	2tl; dh.
Kim; 6-0	Kim. 6-0	Vadoli; 1-4	w.,rv.	sl(Lokshala).; cs; 3tl.; dg; dh.; lib.; dp.
Songadh: 14-0	Local. Tue.	Songadh; 14-0	w.,rv.	sl (Lokshala).; pyt.; Umarada Pir Ps.; dg.
Umerpada; 3-0	Umerpada; 3-0		w.	cs.; (c).
Unai; 8-0	Buhari; 1-0 Wed.	Jeshingpur: 1-0	w.	sl (pr).; pyt.
Bardoli; 2-0		Bardoli, 2-4	w.	sl (m).; pyt.; 2tl.; ch.; lib.; dp.
Zankhvav; 11-0	Mandvi; 4-0 Wed.	Mandvi: 4-0	w.	sl (pr).; ch.
Zankhvav; 5-0	Zankhvav; 5-0	Zankhvav; 5-0	w.	
Unai; 12-4	Limzar; 3-0 Sun.	Bansda; 5-4	w.	sl (pr).; cs.; (c).; tl.
Vyara; 8-0	Buhari; 4-0 Wed.	Kapura; 2-0	w.	pyt.; cs.; (c).
Vyara; 8-0	Vadkui; 1-0 Tue.	Ratania; 2-0	w.	
Unai; 1-0	Unai; 1-0 Tue.	Uanai: 2-0	w.,rv.	sl (pr).; pyt.; cs (fmg).; 2tl.; lib.
Vyara; 8-0	Panchol; 3-0 Fri.	Jeshingpur; 1-0	w.	sl (pr).; pyt,; cs.
Bulsar; 73-0	Ozar; 9-0 Thu.	Dharampur;55-0	rv.,n	
Local;	—	—	w.	sl (pr).; ch.; 2lib.
Dungri; 2-0	Dungri; 2-0	Dungri; 2-0	w.	sl (pr).; cs.; (c).

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1799	Umarasāḍī MDP.; ઉમરસાડી	W; 8–0	0.7; 331; 61; 331	Kadod; 1-4
1800	Umarasāḍī PRD.; ઉમરસાડી	W; 3–0	7.7; 6869; 1204; 2679	Local;
1801	Umaravāḍā CRS.; ઉમરવાડા	E; 1–6	0.8; 1620; 381; 30	Surat; 1-0
1802	Umaravāṇ MDV.; ઉમરવાણ	W; 12–0	0.6; ....deserted	....
1803	Umarazar MGL.; ઉમરઝર	E; 14–0	2.1; 460; 78; 419	Wankal; 9-0
1804	Umber CRS.; ઉંભેર	SW; 11–0	3.5; 700; 135; 698	Talangpore; 0-5
1805	Umbharāṭ NVR.; ઉંભરાટ	NW; 18–0	9.6; 2988; 854; 589	Local;
1806	Umelāv MGL.; ઉમેલાવ	S; 7–0	2.2; 103; 17; 103	Mangrol; 7-0
1807	Un CRS.; ઉન	SE; 7–0	1.6; 820; 168; 702	Bhestan; 1-0
1808	Un MDV.; ઊન	W; 5–0	0.1; 469; 90; 424	Kadod; 2-0
1809	Un NVR.; ઊન	E; 6–0	1.6; 415; 101; 408	Sisodra; 2-0
1810	Unāī BNS.: ઉનાઈ	N; 7–4	1.2; 1362; 236; 728	Local;
1811	Uñcāmāḷā VRA.; ઉંચામાળા	N; 8–0	6.0; 1587; 288; 1563	Vyara; 8-0
1812	Uñcawān MGL.; ઉંચવાણ	E; 25–0	0.6; 531; 108; 154	Umerpada; 0-1
1813	Unḍāc (Luhar Faliā) GND.; ઊંડાચ (લુહાર ફળીઆ)	S; 7–0	1.3; 1295; 257 ; 660	Local;
1814	Unḍāc (Vāṇiā Fāḷiā) GND.; ઊંડાચ (વાણીઆ ફળીઆ)	S; 7–4	2.1; 1751; 317; 1387	Undac L. F.; 1-4
1815	Unḍhawaḷ CKL.; ઊંઢવળ	NE; 6–4	0.7; 188; 30; 155	Rankuva; 1-0
1816	Unṭaḍī BRL.; ઉંટડી	N; 8–0	2.1; 2042; 424; 449	Local;
1817	Upalapāḍā DRP.; ઉપલપાડા	E; 17–0	1.0; 55; 11; 55	Dharampur; 17-0
1818	Upasal BNS.; ઉપસલ	NW; 3–0	2.7; 906; 185; 873	Bansda; 3-0
1819	Uskeḍ (Khurad) MDV.; ઊસ્કેડ (ખુરદ)	W; 2–0	1.0; 172; 41; 167	Mandvi; 3-0
1820	Uskeḍ (Rāmakunḍ) MDV.; ઊસ્કેડ (રામકુંડ)	W; 15–0	2.2; 443; 87; 422	Tadkeshwar; 4-0

Railway St.; Distance in miles. 5	Weekly Bazar; Distance; Bazar Day. 6	Motor Stand; Distance in miles. 7	Drinking water facilities 8	Institution and other information. 9
Madhi; 11–0	Kadod; 1–4 Sun.	Kadod; 1–4	rv.,w.	cs.
Pardi; 2–0	Pardi; 2–0	Pardi; 2–0	w.	sl (pr).; pyt.; 3tl.; dg.; dh.; 2dp.
Surat; 1–0	Surat; 1–0 Sat.	Local;	w.pl	sl (pr).; dg.
....	....	deserted	....	....
Zankhvav; 3–4	Zankhvav; 3–4	Zankhvav; 3–4	w.n.	
Sachin; 3–0	Surat; 9–0 Sat.	Sachin; 3–4	w.	sl (pr).; cs.; 3tl.
Maroli; 10–0	Maroli; 10–0	Local;	w.	3sl (pr).; pyt.; 3tl.; mq. ch.; 3lib.; dp.
Mangrol; 7–0	Mangrol; 7–0	Dungri; 1–4	w.	
Bhestan; 1–0	Surat; 6–4 Sat.	Local;	w.	sl (pr).; mq.; dg.; ch.
Madhi; 8–0	Kadod; 2–0 Sun.	Bori; 4–0	rv.,w.	sl (pr).; pyt.; cs.; (c).; ch.
Navsari; 7–0	Navsari; 6–0 Sun.	Local;	w.	sl (lokslala).; tl.; dp.
Local;	Local; Tue.	Local;	w.,rv.	sl (pr).; pyt.; cs (mp),; fr (*i*) Ct. Sud.; 11 to Vad 5) Chaitri Jatra for 10 days.; (*ii*)Makar Sankarant fair.; 5tl.; 5dh.; ch.; Unai-place of pilgrimage-famous for its hot water springs and the temple of Unai Mata.
Vyara; 8–0	Vadkui; 1–4 Tue.	Kakadpar; 1–0	w.	sl (pr).; pyt.; cs.; ch.
Umerpadas; 0–1	Umerpada; 0–1		w.	sl (lokshala).; ch.
Bilimora; 2–4	Bilimora; 2–0	Bilimora; 2–4	w.	sl (pr).; pyt.; cs (c).; fr (An Vad 14 & 15).; 3tl.; mq.; dg.; ch.
Bilimora; 3–4	Bilimora; 3–0	Bilimora; 3–4	w.,rv.	2sl (2pr).; pyt.;cs(c).;tr
Rankuva; 1–0	Rankuva; 1–0	Manekpore; 1–0	w.	2sl (pr.; lokshala).;fr (An. Vad. 14).; tl.
Dungri; 2–0	Dungri; 2–0	Dungri, 2–0	w.	3sl (2pr,m).; pyt.; fr (An. Vad 15).; 3tl.; mq.; dh.; lib.; 3dp.
Bulsar; 35–0	Rajpuri Jungle; 8–0 Thu.	Dharampurs: 17–0	p.	
Unai; 7–0	MotiValzar; 1–0 Mon.	MotiValzar; 1–4	w.,rv.	2sl (pr, lokshala).; ch
Madhi; 10–0	Mandvi; 3–0 Wed.	Puna; 0–4	rv.,w.	tl.
Kim 12–0	Amba; 9–0 Sat.	Local;	w.n.	tl.; 2dg.; ch.

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1821	Utārā BRD.; ઉતારા	E;	1-0	2.4;	196;	42;	175	Bardoli;	2-0
1822	Utewā MDV.: ઉટેવા	W;	9-0	4.0;	855;	145;	846	Mandvi;	9-0
1823	Utrāṇ CRS.; ઉત્રાણ	N;	3-0	1.1;	1272;	317;	255	Amroli;	0-5
1824	Uvā BRD.; ઉવા	E;	7-0	3.9;	1028;	164;	984	Madhi;	4-0
1825	Vacharavāḍ NVR.; વછરવાડ	E;	10-0	0.8;	383;	73;	376	Ugat;	1-4
1826	Vāchāvāḍ MHW.; વાછાવાડ	SW;	4-2	0.7;	363;	72;	355	Karchelia;	1-4
1827	Vaḍ CKL.; વડ	N;	7-0	5.3;	1915;	368;	1202	Pipalgabhan;	2-0
1828	Vaḍ MGL.; વડ	SW;	9-0	3.1;	897;	132;	714	Bharadia;	3-0
1829	Vāḍā NVR.; વાડા	NE;	10-0	1.1;	236;	47;	228	Maroli;	2-0
1830	Vaḍadā-Bhensaroṭ SCD.; વડદા-ભેંસરોટ	N;	6-0	0.8;	262;	36;	255	Songadh;	6-0
1831	Vaḍādalā PLN.; વડાદલા	NW;	2-4	1.0;	398;	87;	381	Baleshwar;	1-0
1832	Vaḍadā-Umaradā SGD.; વડદા-ઉમરદા	S;	14-0	0.8;	207;	29;	206	Songadh;	14-0
1833	Vāḍadhā DRP.; વાડધા	S;	15-0	1.4;	141;	25;	141	Dharampur;	15-0
1834	Vaḍagām SGD.; વડગામ	SE;	34-0	0.5;	214;	38,	205	Navapur;	15-0
1835	Vaḍakhambhā DRP.: વડખંભા	N;	8-0	1.2;	357;	62;	357	Dharampur;	8-0
1836	Vaḍakui VRA.; વડકુઈ	N;	8-0	1.8;	564;	86;	551	Vyara;	8-0
1837	Vaḍapāḍā CKL.; વડપાડા	SE;	15-0	0.5;	412;	78;	244	Pipalgabhan;	1-0
1838	Vaḍapāḍā MGL.; વડપાડા	E;	40-0	1.0;	139;	23;	138	Umerpada;	12-0
1839	Vaḍapāḍā VRA.; વડપાડા	SE;	40-0	1.0;	135;	21;	135	Vyara;	6-0
1840	Vaḍapāḍā-Nesu SGD.; વડપાડા-નેસુ	SE,	8-0	0.5;	100;	18;	98	Songadh;	8-0
1841	Vaḍāpāḍā-Tokaravā SGD.; વડપાડા-ટોકરવા	S;	7-0	0.6;	179;	30;	174	Songadh;	7-0
1842	Vaḍapāḍā-Umaradā SGD.; વડપાડા-ઉમરદા	S;	9-0	1.7;	340;	74;	340	Navapur;	7-0
1843	Vaḍasāṅgaḷ GND.; વડસાંગળ	E;	1-6	0.9;	765;	147;	459	Gandevi;	2-0
1844	Vaḍaśet DRP.; વડશેત	SE;	32-0	0.6;	81;	19;	81	Pendha;	16-0
1845	Vāḍā-Sīsodrā NVR.; વાડા-સીસોદ્રા.	SE;	3-0	1.0;	602;	143;	590	Adada;	1-0
1846	Vadhāvā BRD.; વધાવા	E;	4-0	1.5;	520;	105;	512	Bardoli;	4-0
1847	Vaḍhavāniā BRD.; વઢવાનીઆ	W;	13-0	1.8;	807;	149;	741	Kadod;	2-0
1848	Vāḍī DRP.; વાડી	S;	26-0	3.1;	438;	75;	438	Dharampur;	26-0
1849	Vāḍī MGL.; વાડી	NE;	13-0	5.1;	1220;	208;	1054	Zankhavav;	3-0
1850	Vadiā MHW.; વડીઆ	E;	8-0	1.7;	499;	95;	464	Valod;	4-0

Railway St.; Distance in miles.	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance in miles.	Drinking water facilities	Institutions and other information.
5	6	7	8	9
Bardoli; 2-0		Bardoli; 2-0	wr.,v.	
Kim; 22-0	Amba; 2-0 Sat.	Kasala; 2-4	w.	sl (pr).; cs.
Local;	Surat; 3-0 Sat.	Fulpada; 0-4	w., rv.	2tl.; M.; dp; Power House
Madhi; 4-0	Surali; 3-0 Thu.	Syadala; 2-0	w.t.	sl(pr).; pyt.; cs (c); tl.
Navsari; 10-0	Navsari; 11-0 Sun.	Ambada; 2-0	w.	sl(pr).; tl.; ch.
Bardoli; 12-0	Karchelia; 1-4 Tue.	Fulwadi; 1-2	w.	sl(pr).; lib.
Billimora; 13-0	Local: Wed.	Local;	w., rv.	sl(pr).; pyt.; tl.
Zankvav; 3-4	Zankhvav; 3-4	Zankhvav; 3-4	w.,n.	sl(lokshala).; pyt.; cs(c).
Maroli; 2-0	Maroli; 2-0	Mahuva; 2-0	w.	mq.; dg.
Songadh; 6-0	Songadh; 6-0 Sun.	Songadh; 6-0	w.	pyt.
Chalthan; 3-0	Baleshwar; 1-0	Local;	w.	sl(pr).; pyt.; cs(c).; tl.; dh.; ch.; lib.
Songadh; 14-0	Umarda; 2-4 Tue.	Songadh; 14-0	w.,rv.	pyt.
Bulsar;	Dharampur; 15-0 Mon.	Nana-pondha (Chival); 12-0	p.,rv.	
Navapur; 15-0	Navapur; 15-0 Sat.	Navapur; 15-0	w.	sl (lokshala).; pyt.
Pardi; 20-0	Nani Vahiyal; 4-0 Thu.	Nana-pondha; 3-2	w.,p.	sl (lokshala).
Vyara; 8-0	Local; Tue.	Kakadpar; 5-0	w.	sl(pr).; pyt.
Bulsar; 9-0	Khergam; 4-0	Khergam; 4-0	w.,rv.	2sl(pr., Lokshala)
Umerpada; 12-0	Umerpada; 12-0		w.	cs.
Vyara; 6-0	Vyara; 0-9 Sat.	Vyara; 6-0	w.	pyt.; cs(mp).
Songadh; 8-0	Songadh; 8-0 Sun.	Songadh, 8-0	rv.	pyt.
Songadh; 7-0	Songadh; 7-0 Sun.	Songadh; 7-0	w.	pyt.
Navapur; 7-0	Navapur; 7-0 Sat.	Songadh; 9-0	w.,rv.	sl (Lokshala).; pyt.
Gandevi; 2-0	Gandevi; 2-0 Wed.	Gandevi; 1-6	w.	sl(pr).; pyt.; cs(c).; lib.
Bulsar; 51-0	Lavkars; 5-0 Sat.	Chiwal; 23-0	p.	
Vedchha; 6-0	Navsari; 2-0 Sun.	Sisodra; 2-0	w	lib.
		Bardoli; 4-0	rv.	sl(pr).
Timberva; 2-0			w.	
Madhi; 4-0	Kadod; 2-0 Sun.	Kadod; 1-6	P.	sl(pr).
Bulsar; 47-0	Siladha; 4-0 Sat.	Dharampur 26-0		sl.(pr).
Zankhvav; 3-0	Zankhvav; 3-0	Zankhvav; 3-0	w.,n.	sl(pr).; 2tl.; dg.
Madhi; 12-0	Kukarbeda; 1-0	Valod; 4-0	w.	sl(pr).; pyt.; cs(c).; rl.; dg.

Serial No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati. 1	Direction; Travelling distance from taluka/peta H. Q. 2	Area (sq. miles.); Population; Households; Agricultural population. 3	Post office; Distance in miles. 4
1851	Vāḍi-Bhensarot SGD.; વાડી-ભેંસરોટ	N; 6-0	2.5; 795; 130; 795	Songadh; 6-0
1852	Vāḍi-conḍhā BNS.; વાડી-ચોંઢા	SW; 8-0	1.8; 498; 93; 487	Bansda; 8-0
1853	Vadīlā OPD.; વાદીલા	W; 2-0	0.4; ....deserted	....
1854	Vāḍi-Rūpagaḍh SGD.; વાડી-રૂપગઢ	S; 16-0	1.6; 151; 24; 151	Songadh; 16-0
1855	Vaḍod CRS.; વડોદ	S; 4-0	1.6; 269; 64; 262	Bhestan; 1-0
1856	Vaḍod MDV.; વડોદ	NW; 15-0	1.4; 89; 20; 89	Bodhan; 1-0
1857	Vaḍod OPD.; વડોદ	SE; 3-0	1.0; 260; 63; 233	Karamla; 2-0
1858	Vaḍolī BRD.; વડોલી	S; 8-0	1.7; 1429; 318; 1062	Local;
1859	Vaḍolī DRP.; વડોલી	SE; 37-0	7.6; 806; 153; 806	Dharampur; 37-0
1860	Vaḍolī MGL.; વડોલી	W; 4-0	2.0; 326; 63; 314	Simodra; 1-0
1861	Vaḍolī OPD.; વડોલી	NE; 9-4	2.5; 638; 118; 596	Kim; 6-0
1862	Vaḍolī NVR.; વડોલી	E; 7-0	0.8; 442; 100; 351	Maroli; 6-0
1863	Vāgadā-Umaraḍā SGD.; વાગદા-ઉમરદા	N; 3-0	1.4; 191; 29; 191	Songadh; 3-0
1864	Vagalawāḍ GND.; વગલવાડ	N; 6-0	0.4; 114; 46; 114	Vegam; 1-0
1865	Vāghābārī BNS.; વાઘાબારી	SW; 12-0	2.4; 658; 127; 645	Pratapnagar; 3-0
1866	Vaghai BNS.; વઘઈ	E; 11-0	2.9; 100; 23; 97	Local;
1867	Vāghaladharā BLR.; વાઘલધરા	E; 10-0	2.4; 1288; 254; 854	Local.;
1868	Vāghanerā MDV.; વાઘનેરા	N; 1-0	0.7; 125; 45; 125	Mandvi; 1-0
1869	Vāghanerā SGD.; વાઘનેરા	S; 8-0	2.3; 452; 76; 416	Songadh; 8-0
1870	Vāghapānī VRA., વાઘપાણી	N; 12-0	0.8; 131; 19; 106	Vyara; 12-0
1871	Vāgharec GND., વાઘરેચ	SW; 7-0	2.1; 2906; 625; 1302	Local;
1872	Vāghasepā SGD.; વાઘસેપા	SE; 24-0	0.2; 195; 35; 191	Chinchpada; 10-0
1873	Vāghasepā-Kumbhāradā SGD.; વાઘસેપા-કુંભારદા	E; 23-0	0.5; 75; 14; 75	Navapur; 10-0
1874	Vāghavāl DRP.; વાઘવાલ	E; 17-0	1.8; 168; 32; 168	Dharampur; 17-0
1875	Vāghazarī VRA.; વાઘઝરી	SE; 3-4	1.8; 253; 44; 253	Vyara; 3-4
1876	Vāgheca-Kaḍod BRD.; વાઘેચ-કડોદ	N; 7-6	0.1; 179; 43; 157	Pardi Kadod; 1-4
1877	Vāgheca-Sarabhāṇ BRD.; વાઘેચ-સરભાણ	S; 1-2	1.2; 530; 114; 374	Sarbhan; 4-0

Railway St.; Distance in miles.		Weekly Bazar; Distance; Bazar Day,			Motor Stand; Distance in miles.		Drinking water facilities	Institutions and other information.
5		6			7		8	9
Songadh;	6-0	Songadh;	6-0	Sun.	Songadh:	6-0	w.,rv.	sl(pr).
Unai;	15-0	Limzars;	2-0	Sun.	Bansda:	7-0	w.,rv.,	sl(pr).
					...deserted			
Songadh;	16-0	Umardas;	4-0	Tue.	Songadh;	16-0	w.,rv.	sl(pr).; pyt.;
Bhestan;	1-0	Surat;	4-0	Sat.	Bhestan:	2-0	w.	tl.
Kim;	17-0	Bodhan;	1-0	Mon.	Bodhan:	1-0	w.,p.	dg.
Sayans;	7-0	Surat;	7-0	Sat.	Talad;	1-4	p.,w.	tl.; ch.; lib.;
Bardoli;	8-0	—			Bhavasan.	1-0	w.,t.	sl(pr).; pyt.; tl.; lib.; 3dp.
Bulsar;	35-0	Huda;	5-0	Tue.	Dharampur.	37-0	p.	
Simodra;	1-0	Wankal;	10-0	Fri.	Mangrol;	4-0	rv.	sl(pr).; tl.; dg.
Kim;	6-0	Surat;	21-0	Sat.	Local.		w.	sl(pr).; cs.; 3tl.; dg.; lib.
Maroli;	6-0	Maroli;	6-0		Parujan.	3-0	w.	sl(pr).; tl.; lib.
Songadh;	3-0	Songadh.	3-0	Sun.	Songadh.	3-0	w.	pyt.
Vedchha;	7-0	Gandevi;	6-0	Wed.	Gadat;	3-0	w.	
Dholikui;	7-0	Local;		Thu.	Pratapnagar:	2-0	w.	sl(pr).; tl.; ch
Local		Local;			Local;		w.,rv.	
Dungri.	5-0	Local;			Local.		rv.,w.	2sl(2pr).; pyt.; tl.; dh.; ch.
Madhi;	10-0	Mandvi;	1-0	Wed.	Mandvi.	0-4	w.,n.	sl(pr).
Songadh;	8-0	Singpur;	2-0	Mon.	Songadh;	8-0	w.,rv.	sl(lokshala).; pyt.; cs(c).
Vyara;	12-0	Balpur;	5-0	Mon.	Vyara.	12-0	w.	pyt.
Bilimora;	1-0	Bilimora;	1-0		Bilimora;	2-0	w.,t.	4sl(4pr).; pyt.; cs(mp).; fr(Kt. Sud 1); 2tl.; M.; mq.; ch.
Chinchpada;	10-0	Chinchpada;	10-0	Thu.	Chinchpada;	10-0	w.	sl (lokshala).; pyt.
Navapur;	10-0	Navapur	10-0	Sat.	Navapur;	10-0	rv.	
Bulsar;	35-0	Rajpuri; Jungle;	8-0	Thu.	Dharampur;	17-0	p.	sl(pr).
Vyara;	3-4	Vyara;	3-4	Sat.	Vyara;	3-4	w.,rv.,t.	sl (lokshala).; pyt.
Timberva;	3-4	Kadod;	4-0	Sun.	Khoj;	1-4	w.,rv. t.s	sl(pr).; fr Ct. Sud 15).; 2tl; dh.
Navsari;	10-0	—			Local;		w.	sl(pr).; tl.; ch.

Serial No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati. 1	Direction; Travelling distance from taluka/peta H.Q. 2	Area (sq. miles.); Population; Households; Agricultural population. 3	Post office; Distance in miles. 4
1878	Vāghesar MHW.: વાઘેસર	S; 7-0	1.3; 653; 120; 644	Jervavla; 0-4
1879	Vahār MGL.: વહાર	E; 15-0	1.5; 421; 70; 421	Wankal; 9-0
1880	Vaheval MHW.; વહેવલ	S; 13-0	4.9; 2305; 386; 2264	Anaval; 4-0
1881	Vājapur SGD.: વાજપુર	NE; 14-0	1.0; 218; 40; 202	Songadh; 14-0
1882	Vājavad DRP.: વાજવડ	S; 15-0	1.8; 644; 94; 644	Dharampur; 15-0
1883	Vakratāmba MGL;. વક્રતાંબા	NE;	0.1; 73; 9; 65	Umerpada; 10-0
1884	Vālak KMJ.; વાલક	W; 5-0	1.3; 340; 50; 233	Varachhah; 3-0
1885	Valaṇ KMJ.: વલણ	S; 8-0	1.4; 597; 103; 533	Haldharu; 1-0
1886	Valaṇḍi BLR.; વલંડી	E; 12-0	0.9; 225; 36; 218	Ronvel; 3-0
1887	Valāragaḍh MDV.: વલારગઢ	W; 4-0	0.4; 106; 21; 106	Mandvi; 4-0
1888	Valasāḍ BLR.: વલસાડ	....	Please refer No.150(Bulsar)	....
1889	Valathāṇ KMJ.: વલથાણ	S: 6-0	1.2; 332; 64; 332	Umbhel; 1-4
1890	Valavāḍā MHW.: વલવાડા	S; 11-0	2.4; 1918; 255; 1244	Mahuwa; 11-0
1891	[illegible] DRP.: વાલવેરી	SE; 33-0	2.3; 219; 51; 219	Pendha; 15-0
1892	Vālesā MGL.; વાલેસા	W: 15-0	1.2; 186; 48; 179	Kim; 3-4
1893	Vāloḍ VLD.; વાલોડ	H. Q.	7.7; 4863; 979; 3317	Local;
1894	Vālothā VRA ; વાલોઠા	SE; 12-0	0.8; 94; 14; 94	Vyara; 12-0
1895	Valoṭī GND.; વલોટી	W; 1-4	1.7; 1369; 275; 686	Gandevi; 2-0
1896	[illegible] CRS.: વણકવા	NW; 4-4	1.3; .... deserted	....
1897	Vaṇakhās DRP.; વણખાસ	E: 22-0	0.8; 148; 32, 148	Dharampur; 22-0
1898	[illegible] BNS.; [illegible]	W. 2-0	1.7; 668; 143; 667	Vaghai; 3-0
1899	Vāndaradevī VRA.: વાંદરદેવી	SE; 10-0	1.0; 316; 50; 316	Vyara; 10-0
1900	Vāndaravelā CKL.: વાંદરવેલા	8-0	6.0; 2658; 488; 2604	Fadwel; 1-0
1901	Vaṇesā PLN.; વણેસા	E; 6-0	4.1; 1284; 263; 1127	Local;
1902	Vāṅgaṇ BNS.; વાંગણ	SE; 7-0	5.8; 1103; 237; 1084	Bansda; 7-0
1903	Vāṅganapāḍā DRN.; વાંગણપાડા	SE; 35-0	0.2;	deserted 4
1904	Vāṅk MHW.; વાંક	S; 9-0	1.2; 640; 132; 615	Mahuwa; 8-0

Railway St.; Distance in miles.	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance in miles.	Drinking water facilities	Institutions and other information.
5	6	7	8	9
Navsari; 16–0	Khervan; Sat. 1–0	Khervan; 1–0	w.	sl(pr).; pyt.
Zankhvav; 3–0	Zankhvav; 3–0	Zankhvav; 3–0	w.	sl (lokshala).
Anaval; 4–0	Local;	Local	w.,rv.	sl(pr).; 2cs(mp.,c).; lib.
Songadh; 14–0	Songadh; Sun. 14–0	Songadh, 14–0	rv.	sl(pr).; pyt.
Bulsar; 33–0	Ukta; Sun. 8–0	Chiwal; 3–0	w.,P.	sl.; cs(mp).
Umerpada; 10–0	Umerpada; 10–0		w.	
Surat; 7–0	Surat; Sat. 7–0	Laokana; 0–6	w.,rv.	sl(pr).; pyt.; 2mq.; 2dg.
Gangadhra; 4–0	Bardoli, Sat. 6-0	Marethana; 1–0	w.	sl(pr).; pyt.; cs(c).; tl.; lib.
Bulsar; 14–0	Navera; Sun. 2-0	Dadivalli, 0–1	w.,rv.	sl(pr).; dg.
Madhi; 10–0	Mandvi; Wed. 4–0	Mandvi, 4-0	srt.	
....	........Please refer No.	150. ...	....	....
Chalthan; 4–0	Surat; Sat. 8-0	Local,	w.	sl(pr).; pyt.; tl.
Anaval; 7–0	Local; Sun	Local,	w.	sl(pr).; pyt.; 2tl.; dg.; ch; lib.; dp.
Bulsar; 51–0	Lavkar; 5–0; Sat.	Chiwal; 23–0	P.	
Kim; 3–4	Kim; 3–4;	Bhatkol, 2–0	rv	tl.; ch.
Kiher; 7–0	Local; Fri.	Local;	w	4sl (3pr., h).; pyt.; 2cs (c., fmg).; fr (Kt. Sud 15)., 12tl., M.; 2mq.; 3dg.; 3dh.; 2gym.; ch. 2lib.; 4dp.
Vyara; 12–0	Balpur, 6–0; Mon	Vyara; 12-0	w., n.	pyt.
Gandevi; 1–0	Gandevi, 2-0, Wed.	Local,	w.,rv.,	tl (pr).; pyt.; 4tl.; ch.; lib.; dp. Ancient *Wav* (a kind of well).
....	....	deserted	....	....
Bulsar. N.A.	Umarthana; 12–0, Sat.	Dharampur, 22-0		rv., P.
Unai; 10–0	Bansda; 3–0; Fri.	Bansda; 2-0	w., rv.	sl (pr).
Vyara; 10–0	Balpur; 1-4; Mon	Bamnamal-najik. 4–0	w.	sl. (lokshala).; pyt.
Billimora; 20–0	Fadwel; 1 0.			This village is included in Bansda Taluka after the census of 1951.
Gangadhra, 3–0	Gangadhra; 3–0;	Bardoli; 3-0	w.	sl (pr).; pyt.; 2cs (2c).; tl.; ch.; lib.
Unai; 14–0	Bansada; 7 0. Fri.	Bansada; 7–0	rv., w.	sl (pr).; pyt.; cs (c).; ch.
....	....	deserted	....	....
Anaval; 10–0	Valvada; 2–4; Sun.	Local;	w.	sl (pr).; pyt.; cs (mis).; 2tl.; ch.

Serial No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati. 1	Direction; Travelling distance from taluka/peta H. Q. 2	Area (Sq. miles); Population; Households; Agricultural population. 3	Post office; Distance in miles. 4
1905	Vankāch PRD.; વંકાછ	S; 11-0	0.5; 249; 36; 231	Koparli; 1-0
1906	Vānkal BLR.; વાંકલ	E; 14-0	5.8; 2095; 369; 1997	Local;
1907	Vankāl CKL.; વંકાલ	W; 4-0	2.1; 2322; 445; 2300	Billimora; 3-0
1908	Vānkal MGK.; વાંકલ	E; 6-0	4.2; 2001; 389; 933	Local;
1909	Vānkaḷā MDV.; વાંકળા	E; 6 0	1.0; 1097; 180; 488	Tarsada Bargama; 6-0
1910	Vānkalā VRA.; વાંકલા	S; 17-0	1.5; 946; 159; 791	Buhari; 2-0
1911	Vānkāneḍā PLN.; વાંકાનેડા	NW; 7-0	1.0; 410; 79; 363	Chalthan; 1-0
1912	Vānkāner BRD.; વાંકાનેર	SW; 5-4	4.4; 3949; 789; 3155	Local;
1913	Vānkavel SGD.; વાંકવેલ	E; 1-0	2.0; 217; 45; 217	Songadh; 1-0
1914	Vānsadā DRP.; વાંસદા	E; 33-0	1.9; 88; 17; 88	Dharampur; 33-0
1915	Vānsadā BNS.; વાંસદા	......Please refer No. 166	(Bansada)	....
1916	Vānsadārūḍhī KMJ.; વાંસદારૂઢી	N; 9-0	0.5; 287; 57; 279	Umbhel; 1-4
1917	Vānsakui BNS.; વાંસકુઈ	W; 7-0	1.4; 390; 85; 390	Bansda; 6-0
1918	Vānsakui BRD.; વાંસકુઈ	E; 12-2	2.9; 1099; 165; 1071	Madhi; 1-0
1919	Vānsakui VRA.; વાંસકુઈ	6-0	2.3; 853; 163; 837	Vyara; 5-0
1920	Vānsavā CRS.; વાંસવા	NW; 14-0	1.9; 750; 178; 740	Damka; 1-0
1921	Vānsī NVR.; વાંસી	W; 22-0	5.5; 273; 74; 137	Borsi; 0-4
1922	Vānsiā-Taḷāv BNS.; વાંસીઆ-તળાવ	S; 2-0	1.9; 698; 147; 615	Barlada; 2-0
1923	Vānsolī MGL.. વાંસોલી	W; 6-0	0.8; 200; 39; 105	Simodra; 2-4
1924	Vānz CRS.; વાંઝ	S; 10-0	2.4; 999; 225; 822	Local;
1925	Vānzāfaḷī SGD.; વાંઝાફળી	SE; 9-0	0.5; 106; 21; 106	Songadh; 9-0
1926	Vānzalaṭ DRP.; વાંઝલટ	E; 28-0	1.9; 82; 14; 82	Dharampur; 28-0
1927	Vānzaṇā CKL.; વાંઝણા	NE; 8-0	5.3; 2708; 472; 2558	Local;
1928	Vānzaradā SGD.; વાંઝરડા	NE; 15-0	2.5; 776; 140; 684	Vyara; 2-0
1929	Vanzoliā PLN.; વંઝોલીઆ	E; 6-0	1.1; 479; 96; 468	Gangadhra; 3-0
1930	Vāpī PRD.; વાપી	S; 10-0	4.7; 9044; 1675; 2343	Local;
1931	Varāḍ BRD.; વરાડ	N; 5-0	2.6; 2826; 570; 2249	Local;

Railway St.; Distance in miles.	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance in miles.	Drinking water facilities	Institutions and other information.
5	6	7	8	9
Vapi; 6-0	Pandore; 2-4; Wed.	Vapi; 6-0	w., rv.	sl (pr).
Bulsar; 14-0	Faldhara; 2-4; Sun.	Local;	w., rv.	sl (pr).; pyt.; ch.; dp.
Bilimora; 3-0	Bilimora; 3-0;	Chikhali; 4-0	w., t.	2sl (2pr).; pat.; 2cs (2c).
Local;	Local; Fri.	Mangrol; 6-0	w., n.	sl (pr).; pyt.; cs.; 3tl.; dg.; dh.; ch.; lib.; 4 dp.
Madhi; 16-0	Mandvi; 8-0; Wed.	Local;	w., rv.	sl (pr).; dp. Kakdapar Dam Project.
Unai; 6-2	Panchol; 3-0; Fri.	Local;	w., rv.	sl (pr).; pyt.; cs fmg).; lib.
Chalthan; 1-0	Chalthan; 1-0;	Chalthan; 1-0	w., t.	sl (pr).; pyt.; 2tl.; lib.
Bardoli; 6-2		Local;	w.	sl (pr).; pyt.; tl.; mq.; dg.; dh.; ch.
Songadh; 1-0	Songadh; 1-0; Sun.	Songadh; 1-0	w.	pyt.; cs.
Bulsar; 46-0	Nani vahiyal 16-0; Thu.	Dharampur; 33-0	rv.	
....	Please refer No. 166	....		....
Chalthan; 4-0	Surat; 8-0; Sat.	Mirapur; 1-0	w.	sl (pr).; pyt.; cs (c).; tl.; dg.
Anawal; 7-0	Umzar; 1-4; Sun.	Kandol-pada; 3-0	w., str.	sl (pr).; tl.
Madhi; 1-0	Surali; 1-0; Thu.	Local;	w.	sl (pr)., pyt.; cs (mp).; ch.
Vyara; 5-0	Vadkui; 2-0; Tue.	Vyara; 6-0	w.	sl. (pr).; pyt.; cs.
Surat; 16-0	Surat; 16-0; Sat.	Damka; 2-0	w.	sl (pr).
Maroli; 12-0	Maroli; 14-0;	Umbhrat; 5-0	w.	ch.
Unai; 9-0	Bansda; 2-0 Fri.	Bansda; 2-0	w., rv.	sl (pr).; tl
Asarmal; 1-4	Velachha; 4-0	Mangrol; 6-0	w., p.	cs (c).
Sachin; 2-0	Surat. 9-0 Sat.	Sachin; 2-0	w.	2sl (pr, Rastriya Shala).; pyt.; 2cs.; 6tl.
Songadh; 9-0	Umarda; 2-0 Tue.	Songadh; 9-0	w., rv.	pyt.
Bulsar; 33-0	Ukta; 8-0 Sun.	Dharampur 28-0	rv.	
Rankuva; 2-0	Rankuwa; 2-0	Rankuwa; 2-0	w., rv. t.	4sl (4pr).; pyt.; cs (c).
Vyara; 2-0	Vyara; 3-0 Sat.	Vyara; 2-0	w., rv.	sl (pr); pyt.; ch.
Gangadhra; 3-0	Gangadhra; 3-0	Palsana; 6-0	w.	sl (pr).; lib.
Local;	Local;	Local;	w., t.	3sl (2pr, h).; pyt.; cs.; 5tl.; 2mq.; dh.; ch.; lib.; 8dp.
Bardoli; 5-0		Rayam; 1-0	w.	2sl (2pr).; pyt.; cs (mis).; 4tl.; dh.; ch.; lib.; 2dp.

Sr. No.	Village or Town name in English; Taluka abbreviation Village or Town name in Gujarati. 1	Direction; Travelling distance from Taluka/peta H.Q. 2	Area (sq. miles.); Population; Households; Agricultural population. 3	Post office; Distance in miles. 4
1932	Varai PRD.; વરઈ	SE; 6-0	0.8; 245; 47; 245	Sonwada; 1-0
1933	Varajākhaṇ MDV.; વરજાખણ	S; 1-0	1.7; 769; 162; 696	Tarsada 0-4 Bargama;
1934	Varajākhaṇ VRA.; વરજાખણ	SE; 18-0	2.3; 634; 98; 631	Unai; 2-0
1935	Vāraṇā DRP.; વારણા	S; 20-0	0.3; 317; 55; 317	Sukhla; 5-0
1936	Varathāṇ OPD.; વરથાણ	E; 4-3	0 6; ....deserted	....
1937	Varawaṭh DRP., વરવઠ	S, 29-0	4.8; 1175; 260; 1134	Dharampur; 29-0
1938	Varelī MDV.; વરેલી	S; 5-0	3.4; 491; 105; 489	Bodhan; 4-0
1939	Vareli PLN.; વરેલી	N; 8-0	1.0; 117; 16; 85	Kosmada; 2-0
1940	Vareth MDV., વરેઠ	E; 3-0	4.0; 672; 116; 652	Mandvi; 3-0
1941	Vareṭhī MDV.; વરેઠી	NW; 21-0	2.2; 1081; 219; 1067	Tadkeshwar; 3-4
1942	Variāv CRS.; વરીયાવ	N; 6-7	8.7; 2735; 586; 1310	Local;
1943	Vāroli-Jangal DRP.: વારોલી જંગલ	S; 30-0	4 0; 569; 103; 550	Dharampur; 30-0
1944	Vāroli-Talāt DRP.: વારોલી-તલાટ	S; 15-0	3.1; 814; 136; 810	Sukhala; 7-0
1945	Vāsaṇ BLR.; વાસણ	NE; 11-2	2.6; 1138; 244; 916	Undach; 2-0
1946	Vāsaṇ GND ; વાસણ	NE, 6-0	1.9; 795; 82; 690	Amalsad; 1-0
1947	Vasar NVR.; વસર	SE; 7-0	0 8; 386; 88; 351	Ugat; 3-0
1948	Vasarāi MHW.; વસરાઈ	S; 10-0	1.1; 323; 59; 323	Mahuwa; 9-0
1949	Vasarāvi MGL.: વસરાવી	S; 2-0	6.0; 808; 155, 440	Mosali; 2-0
1950	Vasavāri OPD.: વસવારી	E. 10-0	1.2. 294; 60; 281	Sayan; 2-4
1951	Vāsigam MDV, વાસીગામ	S. 2-4	0 04; ....deserted	....
1952	Vasīyar BLR., વસીયર	S, 2-4	0.8; 535; 109; 110	Bulsar; 2-0
1953	Vāṭā CRS.; વાટા	W; 6-0	0.6; 206; 41; 183	Magdalla; 1 0
1954	Vaṭār PRD.; વટાર	SW; 9 0	2.3; 1456; 285, 955	Local;
1955	Vāthoḍā DRP.; વાઠોડા	E; 23-0	2.1; 101; 17. 101	Dharampur; 23-0
1956	Vāṭi BNS.; વાટી	E. 12-0	2.4; 196; 38; 196	Vaghai; 3 0
1957	Vāv CKL.: વાવ	E; 8-0	1.4; 757; 161; 751	Khergam; 1-0
1958	Vāv KMJ.: વાવ	S; 3-0	5.2; 1443; 314; 1275	Local;
1959	Vāvar DRP.; વાવર	SE, 35-0	1.1; 526; 102; 526	Pendha; 11-0
1960	Ved CRS.; વેડ	NW; 4-0	1.1; 1638; 309; 1179	Singanpore; 1-4
1961	Veḍachā CRS.; વેડછા	E, 6-5	1.0; 79; 20; 75	Kumbharia; 1-4

Railway St.; Distance. in miles	Weekly Bazar; Distance: Bazar Day.	Motor Stand; Distance. in miles	Drinking water facilities	Institutions and other information
5	6	7	8	9
Pardi; 7-0	Pardi; 7-0	Panchlai; 2-0	w.	2sl (pr., lokshala).
Madhi; 8-0	Mandvi; 1-0 Wed.	Local;	w.,rv.	sl (pr).; cs.; tl.; dg
Unai; 2-0	Panchol; 3-0 Fri.	Dolvan; 3-0	w.	sl (pr).; pyt.; cs.
Vapi; 11-0	Sukhla; 5-0 Fri.	Nanapondha;10-0	w.,P.	sl.
		deserted		
Bulsar; 47-0	Local; Sun.	Dharampur; 29-0	p.	sl (pr).
Kim; 22-0	Bodhan: 4-0 Mon.	Bodhan: 4-0	w., rv.	sl (lokshala).; tl.
Chalthan; 2-0	Chalthan; 2-0	Local;	w.,t.	tl.
Madhi; 12-0	Mandvi; 3-0 Wed.	Mandvi; 3-0	rv.,w.	sl (lokshala) ; tl.
Valachha: 3-0	Amba: 13-0 Sat.	Karanj; 1-4	P.,w.	sl (pr).; cs mq.
Surat; 6-7	Surat: 6-7 Sat.	Local:	w.,rv.	sl (pr).; pyt.; cs.; 8tl 4mq. 4dg.; 2dh.; 2dp
Bulsar; 53-0	Rakholi: 7-0 Fri.	Rakholi: 8-0	w.,rv.	p. sl.; (pr).
Pardi; 19-0	Sukhala: 7-0 Fri.	Chiwal: 5-0	w.,p.	sl (pr).
Billimora; 2-4	Dungri; 3-4	Dungri; 3-4	w.	sl (pr).; pyt.; tl.;ch.
Amalsad; 1-0	Sari Bujaring: 1-0	Sari Bujarang; 1-0	w.,t.	sl (pr).; tl.; dg.; ch.; lib.
Navasari; 7-0	Navsari; 7-0 Sun.	Munsad; 1-0	w.,p.	
Anaval; 9-0	Valvada: 1-4 Sun.	Local;	w.	sl (pr) ; pyt.
Mangrol: 2-0	Wankal; 3-0 Fri.	Mosali: 2-0	w.	sl (pr).; cs.; mq.; dg.; ch.
Sayan; 2-4	Surat; 10-0 Sat.	Sayan: 2-0	w.	sl (pr).; tl.
		[illegible]		
Bulsar: 2-0	Bulsar: 2-0	[illegible]	w.	sl (lokshala).
Surat; 8-0	Surat; 6-0 Sat.	Gaviar. 0-1	O.	tl.; dg.
Udwada; 4-0	Udwada; 4-0 Tue.	Morai 4-0 PWD Roads	w.,rv.	sl (pr).; pyt.; cs.; (t).1 tl; lib.; dp.
Bulsar; 41-0	Rajpuri Jungle;11-0Thu.	Dharampur;23-0	rv.,p.	sl (lokshala).
Vaghai; 3-0	Vaghai: 3-0	Vaghai: 3-0	w.,rv.	
Bulsar; 12-0	Vadgam; 4-0 Wed.	Khergam; 2-0	w.	sl (pr).
Chalthan; 6-0	Surat: 7-0 Sat.	Local;	w.	sl (pr).; pyt.; 2tl; mq. dg ; dh.; ch.; lib.; 2dg.
Bulsar; 64-0	Huda; 2-4 Tue.	Penth; 11-0	P.	sl (pr).
Surat ; 5-0	Surat; 3-0 Sat.	Local;	rv.	2sl (pm).; pyt.; tl.; dg.; dh.; ch.
Surat; 6-0	Surat: 6-0 Sat.	Local;	w.	

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1962	Vedachā NVR.; વેડછા	NE; 6-0	2.7; 1617; 336; 1229	Local;
1963	Vedachī VRD.; વેડછી	E; 2-0	1.9; 860; 150; 570	Local;
1964	Vegām GND.; વેગામ	NE; 4-0	1.1; 1480; 374; 1170	Local;
1965	Vegī MDV.; વેગી	W; 1-4	1.0; 585; 111; 578	Bodhan; 4-0
1966	Vejalapor BLR.; વેજલપોર	N; 2-0	0.9; 838; 150; 263	Lilapore; 0-4
1967	Vejalapur NVR.; વેજલપોર	NW; 7-0	1.4; 480; 103; 432	Veshma; 2-0
1968	Vekur SGD.; વેકુર	S, 9-0	1.2; 340; 51; 340	Songadh; 8-0
1969	Velāchā MGL.; વેલાછા	W; 10-0	2.3; 971; 198; 445	Local;
1970	Veladhā VRA.; વેલધા	S; 3-0	1 0; 202; 39; 200	Vyara; 3-0
1971	Velañjā KMJ.; વેલાંજા	NW; 4-0	2.4; 583; 113 522	Kathor; 1-4
1972	Velaṇapur CKL.; વેલણપુર	E; 16-0	1.2; 568; 96; 568	Saravni, 3-0
1973	Velaṇapur MHW.; વેલણપુર	SE; 8-0	3.3; 1105; 203; 1074	Mahuwa; 8-0
1974	Velaparavā PRD.; વેલપરવા	SE; 1-4	1.3; 732; 136; 672	Pardi; 2-0
1975	Velapotal DRP.; વેલપોતલ	E; 28-0	0.5; ......deserted	......
1976	Velavāc BLR.; વેલવાચ	E; 15-0	4.2; 1405; 225; 1401	Wankal; 6-0
1977	Velāvi MGL.; વેલાવી	E; 25-0	1.9; 228; 36; 228	Umerpada; 3-4
1978	Velazar SGD.; વેલઝર	W; 10-0	2.3; 377; 60; 377	Songadh; 11-0
1979	Veluk OPD.; વેલુક	SW; 4-0	1.8; 569; 113; 461	Diheri; 2-0
1980	Verākui MGL.; વેરાકુઈ	S; 5 0	3 7; 1135; 200; 920	Wankal; 3-0
1981	Veri-Bhavāḍā DRP.; વેરીભવાડા	S; 14-0	3.4; 303; 58; 303	Dharampur; 14-0
1982	Vesmā NVR.; વેસમા	N; 8-0	2.4; 3777; 787; 1239	Local;
1983	Vestān MGL., વેસ્તાન	S; 6-0	1.9; 110; 24; 110	Mangrol; 6-0
1984	Vesu CRS., વેસુ	SW; 8-2	3.3; 873; 206; 665	Local;
1985	Vihāṇ KMJ.; વિહાણ	E; 10-0	3.5; 1134; 211; 940	Local;
1986	Vihārā OPD.; વિહારા	E; 6-0	1.4; 606; 119; 529	Local;
1987	Vihel CRS.; વીહેલ	NW; 6-0	0.4; ......deserted	......

Railway St.; Distance in miles.	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance in miles.	Drinking water facilities	Institutions and other information.
5	6	7	8	9
Local;	Abrama; 2-4	Local;	w.	sl(pr).;2cs.; (mp, ;m,is).; fr (As. Vad 14 Goddess Agasi) (*tl*) (Ct Sud 8 Goddess Khodial); 4tl.; ch.; lib.; dp.
Madhi; 11-0	Valod; 1-4 Fri.	Valod; 1-4	w.,rv.	2sl (pr. m).; pyt.; 2cs.; (c. fmg).; 2lib.; dp.
Vedchha; 6-4	Gandevi; 6-0 Wed.	Gadat; 2-4	w.	sl (pr).; pyt.; cs (mp). tl; mq.; dg.; dh.
Kim; 19-0	Bodhan; 4-0 Mon.	Areth; 1-4	w.,p.	sl (lokshala),; cs.
Bulsar; 2-0	Bulsar; 2 0	Bulsar; 2-0	w.	sl (pr).; tl.; M.;dh.; 2lib
Navsari; 7-0	Navsari; 7-0 Sun.	Local;	w.	sl (pr) ; pyt.; 4tl.; lib.
Songadh; 10-0	Singpur; 3-0 Mon.	Songadh 8-0	w.,rv.	sl (lokshala).; pyt.;cs. (c).
Local;	Local;		w.	sl (pr).; pyt.; 2tl. dg.; ch.; lib.; 2dp.
Vyara; 3-0	Vyara; 3-0 Sat.	Vyara; 3-0	w.,rv.	cs (fmg).
Sayan; 1-4	Surat; 12-0 Sat.	2-0	w.	sl (pr).; pyt.; 2cs.; (2mis).; tl; ch.; lib.
Bilimora; 17-0	Chikhali; 10-0	Rudwel; 5-0	w.,str.	sl (pr).
Navsari; 16-0	Kharvan; 4-0 Sat.	Satem; 4-0	w.,rv.	sl (pr).; pyt.; cs.; (c) tl; ch.; lib.
Pardi; 2-0	Pardi; 2-0	Pardi 2-0	w.	sl(pr).; pyt.
		...deserted ...		
Bulsar; 14-0	Chichai; 1-0 Sat.	Waghchhipa;1-4	w.,rv.	pyt.
Keori; 1-4	Keori; 1-4		w.	
Songadh; 11-0	Songadh; 11-0 Sun.	Songadh: 11-0	w.	sl (lokshala).
Surat; 10-0	Surat; 10-0 Sat.	Local;	w.p.	sl(pr).; 4tl.; dg.
Wankal; 3-0	Wankal; 3-0 Fri.	Mosali; 5-0	w.	sl(pr); pyt.; cs.
Bulsar; 32-0	Mandava; 6-0 Fri.	Dharampur;14-0	rv.p.	
Maroli; 5-0	Navsari; 8-0 Sun.	Local;	w.	3sl (2pr; h). pyt;. cs;. 5tl; 2mq.; 7dg.; 3dh. ch.; 4lib.; 4dp.
Mangrol; 6-0	Mangrol; 6-0	Dungri; 1-4	w.	tl.; dg.
Surat ; 6-0	Surat; 4-4 Sat.	Piplod; 2-0	w.	sl (pr).; 4tl.; dh.; ch.
Bardoli; 7-0	Bardoli;; 7-0 Sat.		w.	sl (pr).; pyt.; 3tl.; dg.; ch.; lib.; dp.
Sayan; 5-0	Surat; 17-0 Sat.	Takarma; 3-4	w.	sl (pr);.2cs.; (c.mp).;2tl
		deserted ...		

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1988	Vijalapor NVR.; વીજલપોર	SW; 2–0	1.6; 3640; 768; 698	Local;
1989	Vīrapor MDV.; વીરપોર	W; 22–0	2.2; 429; 86; 414	Kim; 10-0
1990	Vīrapor VLD.; વીરપોર	SE; 8–0	0.8; 379; 80; 379	Buhari; 1-4
1991	Virapur VRA.; વિરપુર	NE; 3–0	1.8; 276; 52; 238	Vyara; 3-4
1992	Virathavā SGD.; વિરથવા	SE; 15–0	1.2; 111; 20; 111	Songadh; 15-0
1993	Vīravāḍi NVR.; વીરવાડી	E; 5–0	0.8; 193; 36; 193	Kaliawadi; 2-0
1994	Vīraval DRP.; વીરવલ	SE; 5–0	1.3; 493; 80; 493	Dharampur; 5-0
1995	Virāval NVR. વિરાવળ	N; 1–4	1.0; 2120; 450; 826	Local;
1996	Virakṣet DRP.; વીરક્ષેત	SE; 38–0	7.1; 729; 160; 729	Pendha; 8-0
1997	Visaḍāliā MDV.; વીસડાલીઆ	N; 7–0	0.7; 61; 9; 46	Mandvi; 7-0
1998	Viśālā MDV.; વિશાલા	N; 6–0	0.7; ....deserted	....
1999	Visalapor NVR. વિસલપોર	SE; 3–0	0.4; 27; 4; 12	Kaliawadi; 1-0
2000	Vyārā VRA.; વ્યારા	Head-quarters	2.5; 11327; 2102; 2349	Local;
2001	Zāb MDV.; ઝાબ	W; 10–0	2.6; 549; 96; 549	Bodhan; 7-0
2002	Zāḍapāṭi SGD.; ઝાડપાટી	NW; 6–0	0.5; 79; 15; 69	Songadh; 6-0
2003	Zākharaḍā MGL.; ઝાખરડા	S; 3–0	1.6; 248; 47; 126	Mosali; 4-0
2004	Zāṅkharī VRA.; ઝાંખરી	SE; 12–0	2.0; 563; 102; 553	Vyara; 12-0
2005	Zāṅkhavāv MGL.; ઝાંખવાવ	E; 12–0	1.9; 701; 135; 310	Wankal; 6-0

Railway St.; Distance	Weekly Bazar; Distance Bazar Day.	Motor Stand; Distance	Drinking water facilities	Institution and other information.
5	6	7	8	9
Navsari; 1–0	Navsari; 1–0; Sun.	Local;	w.	sl (pr); pyt cs;(mp); fr (As. Sud. 8; Goddess Ashapuri); 2tl; lib;dp
Kim; 10–0	Amba; 16–0; Sat.	Dhanva; 2–0	w.,p.	sl (pr); tl.
Madhi; 17–0	Buhari; 1–0; Wed.	Buhari; 1–4	w.,rv.	
Vyara; 3–4	Vyara; 3–4; Sat.	Vyara; 3–4	w.,rv.	
Navapur; 15–0	Singana; 9–0; Tue.	Local;	w.	pyt.
Navsari; 4–0	Navsari; 4–0; Sun.	Nasilpore; 0–4	w.	
Bulsar; 22–0	Vadpada; 1–0; Tue.	Dharampur;5–0	w.,rv.	sl; cs (mp); fr (Ct. Sud 9-Ramnavami);tl.
Navsari; 1–4	Navsari; 1–4; Sun.	Local;		Sl (pr); pyt. Ur (Ct. Sud 15 & Ct. Vad 1) Golphad Pir; 3dg; lib.
Bulsar; 56–0	Huda; 3-0; Tue.	Penth; 10–0	p.	
Zankhvav; 7–0	Devgadh; 1–0; Thu.	Local;	w.	
		deserted		
Navsari; 5–0	Navsari; 4–0; Sun.	Kaliawadi; 0-4	w.	
Local;	Local; ; Sat.	Local;	w.,Pl.,P.	5sl; (3pr, m,h); pyt; 3cs; fr (Ps. Sud 15 Khanalshalk Pir) 10tl 2mq; 10dg; 4dh; 2gym. ch; 2lib; 10dp; cch; Fateh Wall (બુરજ) Fort).
Madhi; 15–0	Bodhan; 7-0; Mon.	Local;	w.	sl: (lokshala).
Songadh; 6–0	Songadh; 6–0; Sun.	Songadh; 6–0	w.rv.	
Mangrol; 4–0	Wankal; 5–0; Fri.	Local;	w.	Mq.
Vyara; 12–0	Balpur; 7–0; Mon.	Vyara; 12–0		sl; (pr); pyt.
Local;	Local;	Local;	w.	sl; (pr); pyt; 2cs; (c. mis. p);

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2006	Zarāḷī SGD.; ઝરાળી	S; 6–0	1.1; 201; 42; 195	Songadh; 6-0
2007	Zaraṇī MGL.; ઝરણી	E; 7–0	1.5; 252; 42; 247	Wankal; 1-4
2008	Zarapaṇ MGL.; ઝરપણ	E; 20–0	1.1; 175; 29; 167	Wankal; 11-0
2009	Zarapaṇ MDV.; ઝરપણ	W; 11–4	0.6; 272; 35; 272	Bodhan; 7-0
2010	Zarawāḍā MGL.; ઝરવાડા	NE; 20–0	0.1; 66; 11; 66	Umerpada; 14-0
2011	Zarī BNS.; ઝરી	W; 12–0	2.8; 1232; 218; 1228	Pratapnagar 1-4
2012	Zarī CKL.; ઝરી	E; 17–0	1.3; 826; 159; 826	Godthal; 3-0
2013	Zariā DRP.; ઝરીઆ	SE; 3–4	2.0; 473; 88; 465	Dharampur; 3-4
2014	Zari Daḍhawāḍā MDV.; ઝરી દઢવાડા	NE; 8–0	0.9; 63; 11; 63	Mandvi; 9-0
2015	Zari Dēvagaḍh MDV.; ઝરી દેવગઢ	NE; 13–0	0.9; ....deserted	....
2016	Zariyā Āmba SGD.; ઝરીયા આંબા	NE; 25–0	0.1; 56; 11; 54	Navapur; 15-0
2017	Zēravāvaḷā MHW.; ઝેરવાવળા	SE; 9–0	2.3; 1549; 279; 1451	Local;
2018	Zīpurā MGL.; ઝીપુરા	SE; 4–0	1.5; 218; 39; 218	Wankal; 3-0
2019	Zuj BNS.; ઝુજ	S; 3–0	1.3; 320; 72; 310	Bansda; 3-0
2020	Zumāwāḍī MGL.; ઝુમાવાડી	NE; 12–0	0.1; 82; 37; 82	Umerpada; 7-0

Railway St.; Distance in miles.	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance. in miles.	Drinking water facilities	Institutions and other information.
5	6	7	8	9
Songadh; 6-0	Songadh; 6-0 Sun.	Songadh; 6-0	w.,rv.	sl (lokshala); pyt; ch.
Wankal; 1-4	Wankal; 1-4 Fri.	Mangrol; 7-0	w., n.	
Zankhvav; 5-0	Zankhvav; 5-0	Zankhvav; 5-0	w.	
Kim; 17-0	Amba; 3-0 Sat.	Local;	w.	cs.
Umerpada; 14-0	Umerpada; 14-0			
Dholikui; 4-0	Chapaldhara; 2-6 Sat.	Pratap nagar; 1-4	w.	sl (pr); pyt; tl.
Bulsar; 20-0	Khergam; 9-0	Fadwel; 9-0	w.,str.	2sl (pr); (lokshala); fr (Phg. Vad 5); dg; dh.
Bulsar; 22-4	Nani Vahiyal; 4-0 Thu.	Dharampur; 4-0	w.,rv.	
Zankhvav; 12-0	Devgadh; 7-0 Thu.	Sathvav; 4-0	w.	
......	......	deserted	......	......
Navapur; 15-0	Navapur; 15-0 Sat.	Navapur; 15-0	n.	sl (lokshala).
Navsari; 18-0	Kharvan; 1-4	Local (Except Monsoon); Karchelia; 3-0	w.	sl (pr); pyt; cs (mp); 2tl; ch; lib.
Mangrol; 3-0	Wankal; 3-0 Fri.	Mangrol; 4-0	w.	
Unai; 10-0	Bansda; 3-0 Fri.	Bansda; 3-0	w.,rv.	ch.
Umerpada; 7-0	Umerpada; 7-0			

Serial No.	Village/Town name; in English-Taluka abbreviation; Village/Town name in Gujarati. 1	Direction; Travelling distance from taluka peta H.Q. 2	Area (Sq.ms.); Population; Households; Agricultural Population. 3	Post office; Distance. in miles 4
2024	Abhanakuwa UL.; આભનકુવા			
2025	Acchārī UB.; આચ્છારી	NE ; 23–0	1.8 ; 560 ; 105	Local;
2026	Aḍāḍe NZ.; અડાડે	W ; 6–0	1.7 ; 519 ; 75	Dhanora; 3–0
2027	Āhu NB.; આહુ	NE;	1.2 ; 498 ; 98	Nargoal; 2–0
2028	Akkal Utār NZ,; અક્કલ ઉતાર	W; 18–0	0.2 ; 112 ; 21	Akkalkuwar; 1-0
2029	Akkalākuvā BK.; અક્કલકુવા		0.1 ; 240 ; 39	Akkalkuva; 1–0
2030	Āmad Ṭarf Satone NZ,; આમોદતર્ફ સટોણે	NW; 11–0	2.6 ; 826 ; 126	Kukurmunda; 4-0
2031	Āmod alias Talode NZ.; આમોદ ઉર્ફે તલોદે	N ; 9–0	1.3 ; 453 ; 51	Taḷode; 3-0
2032	Ānandapur UL.; આનંદપુર	W ; 12–0	2.1 ; 555 ; 103	Navapur; 10-0
2033	Āṇagāon UB,; આણગાંવ	W ; 9–0	1.6 ; 732 ; 122	Shirgon; 1-0
2034	Ankalās UB.; અંકલાસ	NE ; 19-0	4.9 ; 1800 ; 324	Bhilad; 5-0
2035	Anṭrulī NZ.; અંટ્રુલી	N ; 3–0	2.0 ; 610 ; 68	Nizar; 2 0
2036	Ārakunḍi NZ.; આરકુંડી	...	...	...
2037	Āśāpur NZ.; આશાપુર	NW ; 12–0	0.3 ; 301 ; 55	Akkalkuwa; 3-0
2038	Āsarāwe NZ,; આસરાવે	NZ; 9–0	1.3 ; 923 ; 135	Taloda; 4-0
2039	Āste alias Budhāvaḷ NZ.: આષ્ટે ઉર્ફે બુધાવળ	NZ: 8–0	1.5 ; 496 ; 61	Taloda; 4-0
2040	Bahurūpe NZ.; બહુરૂપે	NE ; 6–0	2.9 ; 1357 ; 142	Taloda; 3-0
2041	Bāḷade NZ,; બાળદે	SE ; 10–0	2.1 ; 1504 ; 188	Taloda; 3 0
2042	Bej NZ.; બેજ	NW ; 10–0	2.7 ; 1217 ; 196	Kukurmunda; 2-0
2043	Belāmbe NZ.; બેલાંબે	NW ; 8–0	0.7 ; 412 ; 70	Kukurmunda; 4-0

AND THANA DISTRICTS
STATE ON 1ST MAY 1960

Railway St.; Distance.	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance.	Drinking water facilities	Institutions and other information.
5	6	7	8	9
				Forest
Karambele; 1-0	Local; Thu.	Valvada; 1-0	w.	sl(pr) ; ch ; tl ; pyt.
Nandurbar; 5-0	Nandurbar; 5-0; Tues.	Pimplod; 3-0	rv.	tl ; pyt.
Sanjan; 5-0	Khattalwad; 2-0; Sat.	Local;	w.	sl(pr) ; pyt.
Nandurbar; 25-0	Akkalkuwa; 1-0; Wed.	Akkalkuwa; 1-4	w.	pyt.
Nandurbar; 23-0	Akkalkuva; 1-0; Wed.	Deserted;		
Nandurbar; 18-0	Kukurmunda; 4-0, Thu.	Kavathe; 5-0	w.	sl(pr) ; pyt.
Nandurbar; 14-0	Taloda; 3-0; Fri.	Taloda; 2-0	w.	sl(pr) ; etl ; o ; pyt.
Bhadbhunja; 1-0	Navapur; 10-0; Sat.	Navapur; 8-0	w.; rv.	sl(pr) ; pyt.
Bhilad; 3-0	Jambhuri; 2-0; Wed.	Shirgaon; 1-4	w.	sl(pr) ; pyt.
Bhilad; 5-0	Talwada, 5-0; Sun.	Bhilad; 4-0	w.	2 sl(pr) ; pyt.
Nandarbar; 12-0	Nandarbar; 12-0, Tues.	Sajipur; 0-4	rv.	sl(pr) ; tl ; pyt.
...	...	...	...	Forest.
Nandarbar; 20-0	Akkalkuwa; 3-0; Wed.	Kavith; 6-0	w.	sl(pr) ; pyt.
Nandarbar; 30-0	Taloda; 3-0, Fri.	Hatode; 2-0	w.; rv.	sl(pr) ; dh ; 2tl ; cs(mp); pyt.
Nandarbar; 19-0	Taloda; 4-0; Fri.	Taloda; 4-0	w.	sl(pr) ; cs(mp) ; pyt.
Nandarbar; 20-0	Taloda; 3-0; Fri.	Hatode; 3-0	rv.	sl(pr) ; lib ; 3tl ; 2cs(mp); pyt.
Nandarbar; 11-0	Taloda; 3-0; Fri.	Taloda; 3-0	w;n.	sl(pr) ; pyt.
Nandarbar; 16-0	Kukurmunda; 2-0;Thu.	Kavithe; 4-0	r.	sl(pr) ; cs(mp) ; pyt.
Nandurbar; 18-0	Kukurmunda; 4-0;Thu.			

Serial No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati 1	Direction; Travelling distance from taluka peta H.Q. 2	Area (sq.ms.); Population; Households; Agricultural population. 3	Post office; Distance. in miles 4
2044	Bhāḍabhuñjā UL; ભાડભુંજા	N ; 7–0	2.8 ; 815 ; 140	Navapur 8–0
2045	Bhāmasāḷ NZ; ભામસાળ	NE ; 10–0	0.9 ; 149 ; 23	Taloda 6–0
2046	Bābaraghaṭ UL; બાબરઘાટ	E ; 4–0	2.1 ; 81 ; 522	Navapur 4–0
2047	Bhāṭikarambeli UB; ભાટીકરંબેલી	W ; 6–0	1.3 ; 631 ; 123	Solsumbha 1–0
2048	Bhilāḍ UB; ભીલાડ	NE ; 18–0	2.9 ; 1606 ; 328	Local
2049	Bhilabhāvali NZ; ભીલભાવલી	W ; 10–0	1.9 ; 775 ; 129	Dhausra 3–0
2050	Bhilajāmbeli NZ; ભીલજામ્બેલી	SW ; 12–0	3.7 ; 1320 ; 193	Dhanora 2–0
2051	Bhint Bk. UL; ભીંત બુ.	W ; 0–4	1.7 ; 719 ; 134	Navapur 2-0
2052	Bhint Kh. UL; ભીંત ખુર્દ	W ; 3–0	4.0 ; 961 ; 154	Navapur 5–0
2053	Borade NZ; બોરદે	W ; 7–0	1.8 ; 560 ; 94	Nandarbar 2–0
2054	Borāṭhe NZ; બોરાઠે	W ; 8–0	4.3 ; 1393 ; 229	Rauala 8–0
2055	Borigāon alias Kacigaon UB; બોરીગાંવ ઉર્ફે કચીગાંવ	NW ; 25–0	2.9 ; 1114 ; 173	Achhari 4–0
2056	Borikuwā NZ; બોરીકુવા	W ; 10–0	0.7 ; 170 ; 31	Akkalkuva 1–0
2057	Boralāi UB; બોરલાઈ	NE ; 18–0	2.4 ; 931 ; 168	Karambele 1–0
2058	Cacārabundā UL; ચાચરબુન્દા	N ; 2–0	2.5 ; 547 ; 84	Songadh 8–0
2059	Chāpati UL; છાપતી	E ; 8–0	2.1 ; 407 ; 64	Navapur 8–0
2060	Cokhiāmblī NZ; ચોખી આંબલી	W ; 17–0	0.2 ; 594 ; 99	Akkalkuva 1–0
2061	Cincode NZ; ચિંચોદે	E ; 5–0	1.7 ; 458 ; 81	Nizar 3–0
2062	Ciramaṭi NZ; ચિરમટી	NW ; 8–0	0.5 ; 301 ; 44	Taloda 5–12
2063	Corgām NZ; ચોરગામ	...	...	...
2064	Dābariāmbā NZ; ડાબરીઆંબા	NW ; 20–0	1.2 ; 441 ; 58	Akkalkuva 12–0

Railway St.; Distance.	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance.	Drinking water facilities	Institutions and other information.
5	6	7	8	9
Local	Navapur 8-0 Sat.	Navapur 7-0	w	sl(pr) ; ch ; pyt.
Nandurbar 14-0	Taloda 6-0 Fri.	Taloda 4-0	rv	sl(pr) ; tl ; pyt.
Navapur 4-0	Navapur 4-0 Sat.	Navapur 8-0	n	sl(pr) ; pyt.
Solsumbha 1-0	Khatalwad 2-0 Sat.	Umbergaon Rd. 2-0	w ; rv	sl(pr) ; pyt.
Local	Achhari 2-0 Thu.	Local	w	4sl(pr) ; dp ; tl ; cs(mp) ; pyt.
Khandbare 12-0	Dhanora 3-0 Sat.	Dhanora 4-0	l	sl(pr) ; tl ; tpyt
Khandbara 8-0	Dhanora 2-0 Sat.	Bhiljambeli 1-0	w ; rv	sl(pr) ; pyt.
Navapur 1-0	Navapur 2-0 Sat.	Navapur 4-0	w ; rv	sl(pr) ; cs ; pyt.
Navapur 5-0	Navapur 5-0 Sat.	Navapur 5-0	w ; rv.	sl(pr) ; pyt.
Nandarbar 1-0	Nandurbar 2-0 Tue.	Dhanora 3-0	w ; rv	sl(pr) ; 2tc ; cs ; pyt.
Tighi 6-0	Koparti 6-0 Sat.	Velade 4-0	rv	2sl(pr) ; 3tl ; 2cs ; pyt.
Karambele 4-0	Jambhari 6-0 Wed.	Karambele 4-0	w	sl(pr) ; pyt.
Nandarbar 23-0	Akkalkuva 1-0 Wed.	Akkalkuva 1-0	w	pyt.
Karambele 1-0	Achhari 0-3 Thu.	Karsiv bele 1-0	w	2sl(pr) ; o(np) ; pyt.
Songadh 10-0	Songadh 8-0 Sun.	Songadh 6-0	w	sl(pr) ; pyt.
Navapur 8-0	Navapur 9-0 Sat.	Navapur 9-0	w	sl(pr) ; pyt.
Nandarbar 20-0	Taloda 5-0 Fri.	Akkalkuva 1-0	w	sl(pr) ; pyt.
Nandarbar 10-0	Nandarbar 10-0 Tue.	Sajipur 2-0	rv	sl(pr) ; tl ; cs ; pyt.
Nandarbar 19-0	Taloda 5-0 Fri.	Taloda 4-0	w	sl(pr) ; cs(mp) ; pyt.
...	...	...	...	Deserted.
Nandarbar 40-0	Akkalkuva 12-0 Wed.	Akkalkuva 5-0	w ; rv	sl(pr) ; pyt.

Serial No.	Village/Town name in English; Taluka abbreviation. Village/Town name in Gujarati. 1	Direction; Travelling distance from taluka/peta H.Q. 2	Area(Sq. ms.); Population; Households; Agricultural Population 3	Post office; Distance in miles 4
2065	Dahāḍ UB.; દહાડ	NE ; 4–0	0.7 ; 236 ; 56	Umbergaon; 1–0
2066	Dehali UB.; ડેહલી	NE ; 10–0	3.7 ; 1674 ; 309	Bhilad; 2–0
2067	Dehari UB.; દેહરી	S ; 2–0	4.2 ; 2536 ; 335	Local;
2068	Devhāḷe NZ.; દેવ્હાળે	NE ; 4–2	2.0 ; 695 ; 62	Nandarbar; 7–0
2069	Dhaj UL.; ધજ	W ; 5–0	0.7 ; 133 ; 22	Navapur; 5–0
2070	Dhanoli UB.; ધનોલી	NE ; 15–0	1.5 ; 907 ; 174	Bhilad; 1–0
2071	Ekalehare UB.; એકલેહરે	NE ; 24–0	0.9 ; 399 ; 77	Karambele; 1–0
2072	Gāḍid NZ.; ગાડીદ	SE ; 6–0	1.0 ; 189 ; 35	Kukurmunda; 1-0
2073	Gāmaḍī NZ.; ગામડી	W ; 12–0	1.0 ; 221 ; 33	Dhanora; 3–0
2074	Gangathā NZ.; ગંગથા	NW ; 20–0	1.7 ; 1023 ; 179	Kukurmunda; 7–0
2075	Ghimase Kākarīye UB.; ઘીમસેકાકરીયે	SW ; 7–0	0.5 ; 315 ; 65	Local;
2076	Gorāse NZ.; ગોરાસે	N ; 11–0	1.2 ; 231 ; 45	Taloda; 3–4
2077	Govāḍā UB.; ગોવાડા	S ; 3–4	2.7 ; 767 ; 152	Dehari; 1-0
2078	Gujharapur NZ.; ગુઝરપુર	W ; 13-0	0.9 ; 277 ; 48	Dhanora; 4-0
2079	Haradulī NZ.; હરડુલી	E ; 2–0	0.9 ; 275 ; 52	Nizar; 1-0
2080	Harīpur UL.; હરીપુર	N ; 5–0	2.4 ; 316 ; 52	Navapur; 3-0
2081	Hātanur Digar NZ.; હાતનુર દિગર	W ; 12–0	1.8 ; 536 ; 76	Dhanora; 4-0
2082	Hātoḍe NZ.; હાતોડે	NE ; 5–0	1.6 ; 668 ; 109	Taloda; 2–0
2083	Hingaṇī Digar NZ.; હિંગણી દિગર	NE ; 5–2	0.8 ; 286 ; 60	Nandarbar; 10–0
2084	Hoḷ NZ.; હોળ	NE ; 5–0	0.7 ; 84 ; 11	Taloda; 6–0
2085	Humaraṇ UB.; હુમરણ	W ; 7–4	0.6 ; 221 ; 38	Local;

Railway St.; Distance.	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance.	Drinking water facilities	Institutions and other information.
5	6	7	8	9
Umbergaon Road.; 1-0	Khatalwada; 6-0; Sat.	Local;	w.	sl(pr); tl; dp; pyt.
Bhilad; 2-0	Talavada; 1-0; Sun.	Bhilad; 1-0	w.	4sl(pr); dp; pyt.
Umbergaon Road.; 4-0	Khatalwada; 8-0; Sat.	Local;	w.	4sl(pr); dp; dg; lib; 3tl; cs(mp); pyt.
Nandarbar; 7-0	Nandarbar; 7-0; Tue.			
Navapur; 5-0	Navapur; 5-0; Sat.	Navapur; 4-0	w; rv.	sl(pr); pyt.
Bhilad; 1-0	Talawada; 1-4; Sun.	Bhilad; 0-4	w.	2sl(pr); cs(mp); pyt.
Karambele; 1-0	Jambhuri; 1-4; Sat.	Karambele; 1-0	w.	sl(pr); pyt.
Nandarbar; 15-0	Kukurmunda; 1-0; Thu.	Kukurmunda; 0-4	rv.	sl(pr).
Khandbara; 9-0	Raigadh; 1-0; Thu.	Local;	w.	sl(pr).
Nandarbar; 28-0	Akkalkuwa; 3-0; Wed.	Akkalkuwa; 3-0	rv; n.	sl(pr); cs(mp).
Sanjan; 1-0	Khatalwada; 3-0; Sat.	Sanjan; 1-0	w.	sl(pr); pyt.
Nandarbar; 18-0	Taloda; 3-4; Fri.	Local.	rv.	sl(pr).
Umbergaon Road.; 5-0	Khatalwada; 9-0; Sat.	Local;	w.	sl(pr); pyt.
Khandbara; 8-0	Raigadh; 2-0; Thu.	Raigadh; 2-0	w.	sl(pr); tl; cs(pp); pyt.
Nandarbar; 7-0	Nandarbar; 7-0; Tue.	Nizar; 2-0	w.	sl(pr); tl; pyt.
Navapur; 3-0	Navapur; 3-0; Sat.	Navapur; 6-0	w; rv.	sl(pr); pyt.
Khandbara; 12-0	Raigadh; 3-0; Thu.	Raigadh; 3-0	rv.	sl(pr); pyt.
Nandarbar; 13-0	Taloda; 2-0; Fri.	Taloda; 2-4	rv.	sl(pr); dh; etl; pyt.
Nandarbar; 10-0	Nandarbar; 10-0; Tue.	Kotvati; 2-0	rv.	sl(pr); tl; pyt.
Nandarbar; 14-0	Taloda; 6-0; Fri.	Taloda; 5-0	rv.	
Sanjan; 7-0	Khattalwada; 4-0; Sat.	Sanjan; 2-0	w; rv.	sl(pr); pyt.

Serial No.	Village/Town name; Taluka abbreviation, Village/ Town name in Gujarati. 1	Direction Travelling distance from taluka peta H.Q. 2	Area (Sq.ms.); Popuation; Households; Agricultural Population 3	Post office; distance in miles 4
2086	Itawai NZ; ઈતવઈ	NW ; 20–0	0.8 ; 567 ; 97	Kukurmunda 5–0
2087	Jamburī UB; જંબુરી	W ; 22–0	1.0 ; 484 ; 95	Karambele 3–0
2088	Jāmane UL: જામંને	N ; 8–0	1.1 ; 407 ; 72	Songadh 3–0
2089	Jāmakī UL; જામકી	W ; 8–0	2.0 ; 535 ; 96	Navapur 7–0
2090	Kācalī UL; કાચલી	N ; 5–4	0.7 ; 208 ; 35	Navapur 6–0
2091	Kacigāon UB; કચીગાંવ	NE ; 27–0	2.3 ; 856 ; 145	Achhari 5–0
2092	Kālai UB; કાલઈ	N ; 22–0	1.8 ; 1176 ; 244	Karambele 1–4
2093	Kalagāon UB; કલગાંવ	N ; 22–4	4.8 ; 802 ; 145	Phansa 2–0
2094	Kamaḷāpur UL; કમળાપુર	N ; 11–0	0.2 ; 122 ; 25	Navapur 10–0
2095	Karambelī UB; કરંબેલી	N ; 22–0	2.1 ; 1510 ; 310	Local
2096	Karambele Pāṭ UB; કરંબેલે પાટી	NE ; 17–0	1.6 ; 919 ; 214	Local
2097	Kaṭaṣwān UL; કટશ્વાન	W ; 5–0	2.4 ; 915 ; 146	Navapur 5–0
2098	Kaviṭhe NZ; કવીઠે	N ; 9–0	1.1 ; 419 ; 58	Kukurmunda 1–0
2099	Kaḷamī NZ; કળમી	NE ; 13–0	1.4 ; 343 ; 54	Kukurmunda 1–6
2100	Kevaḍāmoi NZ; કેવડામોઈ	NW ; 13–0	...	...
2101	Khāpadā UL; ખાપદા	N ; 3–0	1.2 ; 468 ; 80	Navapur 2–0
2102	Khairave alias Dhonere NZ; ખેરવે ઉર્ફે ધોનેરે	W ; 14–0	1.4 ; 477 ; 79	Dhanora 6–0
2103	Khattalawāḍā UB; ખટલવાડા	NE ; 4–0	13.4 ; 7090 ; 1431	Local
2104	Khodade NZ; ખોદડે	W ; 6–0	2.1 ;... 936 ; 120	Nandarbar 12–0
2105	Koṇḍhraj NZ; કોંઢરજ	NE ; 11–0	1.2 ; 356 ; 26	Kukurmunda 1–0
2106	Koḍhalī BK NZ; કોઢલી	N ; 3–0	3.5 ; 911 ; 156	Nizar 2–0

Railway St.; Distance.	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance.	Drinking water facilitie	Institution and other information.
Nandarbar 24-0	Akkalkuwa 4-0 Sat.	Sanjan 2-0	w ; rv	sl(pr) pyt.;
Sarakmbele 3-0	Local Wed.	Valvada 3-0	w ; rv	sl(pr) ; pyt.
Songadh 6-0	Songadh 6-0 Sun.	Songadh 6-0	w	sl(pr) ; pyt.
Bhadbhunja 1-0	Navapur 7-0 Sat.	Navapur 7-0	w ; rv	sl(pr) ; pyt.
Navapur 6-0	Navapur 6-0 Sat.	Navapur 6-0	w ; rv	sl(pr) ; cs ; pyt.
Karambele 6-0	Achhari 5-0 Thu.	Achhari 5-0	w	sl(pr) ; pyt.
Karambele 1-4	Jambhuri 4-0 Wed.	Palikarembeli 1-3	w	sl(pr) ; mq ; dib ; tl ;
Bhilad 8-2	Maroli 3-0 Fri.	Phansa 2-0	w	sl(pr) ; 2dg ; a(mp) ; pyt.
Navapur 10-0	Navapur 10-0 Sat.	Navapur 8-0	rv	pyt.
Local	Achhari 1-0 Thu.	Local	w	sl(pr) ; 8tl ; cs ; pyt. indrsgadh an old fort.
Bhilad 8-0	Jambhuri 3-0 Wed.	Local	w	2sl(pr) ; tl ; cs(mp) ; pyt.
Navapur 5-0	Navapur 5-0 Sat.	Navapur 4-0	w ; rv	sl(pr) ; pyt.
Nandarbar 14-0	Kukurmunda 1-0 Fri.	Local	rv	2tc ; pyt.
Nandarbar 21-0	Kukurmunda 1-6 Thu.	Kordraj 0-4	w	2sl(pr) ; cs(mp) ; pyt.
...	...	Akkaltave 3-0	w ; rv	sl(pr) ; pyt.
Navapur 2-0	Navapur 2-0 Sat.	Navapur 5-0	w	Sl(pr) ; cs ; pyt.
Khandbara 13-0	Vadali 3-0 Fri.	Raigadh 1-0	rv	sl(pr).
Sanjan 3-	Local Sat.	Local	w ; t	7sl(pr),m) ; 43m, mg, 3dp dg, dib ; 7tl ; Asandevi fr. (vsk. Asd. 15).
Nandarbar 12-0	Dhanora 2-0 Sat.	Pimplod Tarf Dhanora 3-0	w v	3sl(pr) ; 2tl ; cs ; pyt.
Nandarbar 20-0	Kukurmunda 1-0 Thu.	Local	w ; n	sl(pr) ; cs(mp) ; pyt.
Nundarbar 14-0	Nundarbar 14-0 Tue	Nizar 3-0	w	pyt.

Serial No.	Village/Town name; in English; Taulka abbreviation. Village/ Town name in Gujarati; 1	Directon; Travelling distance from taluka/ peta H. Q. 2	Are (Sq. miles);Population; Households; Agricultural Population. 3	Post office; Distance in miles. 4
2107	Kukuramuṅḍā NZ.; કુકુરમુંડા	SE ; 6–0	1.9 ; 3149 ; 584	Local ;
2108	Lakhamīkhede NZ.; લખમીખેડે	W ; 12–0	2.0 ; 631 ; 105	Dhanora ; 2–0
2109	Lekurawāḍī NZ.; લેકુરવાડી	W ; 10–0	6.9 ; 107 ; 14	Dhanora ; 3–0
2110	Mahamadpur NZ.; મહમદપુર		0.5 ;	...
2111	Malāv UB.; મલાવ	NE ; 13–0	2.2 ; 722 ; 140	Bhilad ; 2–0
2112	Mamakavāḍā UB.; મમકવાડા	N ; 10–0	0.9 ; 441 ; 87	Marali ; 4–0
2113	Mānḍe UB.; માંડે	N ; 7–0	0.9 ; 1760 ; 292	Shirgaon ; 2–0
2114	Māṇekapur UB,; માણેકપુર	N ; 3–0	1.9 ; 959 ; 195	Khattalwada ; 3–0
2115	Māṇekapur UL.; માણેકપુર	N ; 6–0	1.7 ; 405 ; 80	Navapur ; 3-0
2116	Marolī UB.; મરોલી	N ; 9–0	7.1 ; 5265 ; 1064	Local ;
2117	Maṭāvaḷ NZ.; મટાવળ	N ; 9–0	1.1 ; 472 ; 72	Taloda ; 3–0
2118	Medapur NZ,; મેદપુર	SE ; 10–0	0.9 ; 242 ; 33	Kukurmunda; 4–0
2119	Mirokot UL.; મીરકોટ	W ; 13–0	2.4 ; 698 ; 118	Navapur ; 12–0
2120	Modale NZ.; મોદળે	SE ; 9–0	1.1 ; 509 ; 53	Kukurmunda ; 4–0
2121	Mohan UB.; મોહન	N ; 22–0	3.6 ; 1752 ; 378	Karambele ; 3–0
2122	Moraṁbā NZ.; મોરંબા	W ; 13–0	2.1 ; 966 ; 162	Akkalkuva ; 2–0
2123	Mubārakapur NZ.; મુબારકપુર	NW ; 1–0	1.7 ; 675 ; 88	Nizar ; 1–0
2124	Nagawās UB.; નગવાસ	NE ; 16–0	1.3 ; 450 ; 81	Bhilad ; 5–0
2125	Nāhulī UB.; નાહુલી	NE ; 23–0	1.2 ; 459 ; 84	Karambele ; 1–0
2126	Nānachaḷ UL.; નાનચળ	N ; 10–0	0.9 ; 298 ; 52	Songadh ; 8–0

Railway St.; Distance.	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance.	Drinking water facilities	Institutions and other information.
5	6	7	8	9
Nandarbar; 21-0	Local; Thu.	Local;	w; rv.	sl(pr); mp; dp; dg; ub; stc; pyt.
Khandbara; 12-0	Dhanora; 2-0; Sat.	Nesarvade; 2-0		sl(p); cs; pyt.
Khandbara; 10-0	Dhanora; 3-0; Sat.	Rajgadh; 2-0	rv.	pyt.
...	...	...	...	deserted
Bhilad; 2-0	Talwada; 2-0; Sun.	Bhilad; 3-0	w.	sl(pr); pyt.
Sanjan; 9-0	Marali; 4-0; Fri.	Local;	w.	sl(pr); pyt.
Bhilad; 4-0	Khattalwada; 4-0; Sat.	Local;	w.	4sl(pr); lib; pyt.
Sanjan; 6-0	Khattalwada; 3-0; Sat.	Navapur; 3-0	w; rv.	sl(pr); pyt.
Navapur; 3-0	Navapur; 12-0; Sat.	Local;	w.	2sl(pr); 5m; tl; pyt.
Sanjan; 12-0	Local; Fri.	Local;	w.	10sl(pr); dp; dg; 3tl; KalBhairav fr. ct. sun. 15 cs(mp); pyt.
Nandarbar; 17-0	Taloda; 3-0; Fri.	Taloda; 3-0	w.	sl(pr); tl; cs; pyt.
Nandarbar; 18-0	Kukurmunda; 4-0; Thu.	Taloda; 7-0	w.	sl(pr); cs.
Bhadbhunja; 3-0	Navapur; 12-0; Sat.	Navapur, 8-0	w; rv.	sl(pr); pyt.
Nandarbar; 18-0	Kukurmunda; 4-0; Thu.	Taloda, 6-0	w.	sl(pr); mg; cs; pyt.
Karambele; 3-0	Jambhuri; 0-4; Wed.	Palikarambele; 3-0	w; rv.	3sl(pr); dg; lib; tl; cs; pyt.
Nandarbar; 22-0	Akkalkuwa; 2-0; Wed.	Akkalkuwa; 2-0	w.	sl(pr); ch; pyt.
Nandarbar; 11-0	Nizar; 1-0; Sun.	Nizar; 1-0	t.	sl(pr); ch; tl; pyt.
Bhilad; 5-0	Talwada; 4-0; Sun.	Bhilad; 3-0	w.	sl(pr); pyt.
Karambele; 1-0	Jambhuri; 2-0 Wed.	Karambele; 1-0	w.	sl(pr); pyt.
Bhadbhunja; 3-0	Songadh; 8-0; Sun.	Navapur; 10-0	w.	sl(pr); pyt.

Sr. No.	Village/Town name; Taluka abbreviation. Village/ Town name in Gujarati; 1	Direction; Travelling distance from Taluka/ peta H.Q. 2	Area (Sq. miles); Population; Households; Agricultural Population. 3	Post office; Distance in miles. 4
2127	Nāndagāon UB; નાંદગાંવ	NE ; 14-0	1.3 ; 562 ; 114	Bhilad 4-0
2128	Nārāyaṇapūr UL; નારાયણપુર	W ; 7-0	12.3 ; 2243 ; 362	Navapur 10-0
2129	Nāragoaḷ UB; નારગોળ	N ; 2-0	3.6 ; 4131 ; 860	Local
2130	Nāsarapur NZ; નાસરપૂર	W ; 14-0	1.9 ; 417 ; 66	Dhanora 7-0
2131	Nevāḷe NZ; નેવાળે	N ; 9-0	1.3 ; 456 ; 58	Dhanora 4-0
2132	Nibhore NZ; નિભોરે	NE ; 11-0	2.4 ; 852 ; 131	Taloda 0-5
2133	Nizar NZ; નિઝર	HQ;	5.9 ; 3227 ; 490	Local
2134	Nurābād UL; નુરાબાદ	W ; 5-0	0.8 ; 279 ; 75	Nawapur 5-0
2135	Pānkhari UL; પાંખરી	W ; 15-0	1.5 ; 356 ; 57	Navapur 14-
2136	Paḷagām UB; પળગામ	NE ; 2-0	2.8 ; 1189 ; 271	Umbergaon 4
2137	Pāli UB; પાલી	N ; 22-0	2.3 ; 762 ; 142	Karambele 1
2138	Paraculī UL; પરચુલી	N ; 9-0	1.4 ; 234 ; 40	Navapur 10-0
2139	Pāṇibārā NZ; પાણીબરા	NW ; 12-0	1.0 ; 271 ; 39	Kukurmunda 4-0
2140	Pāṭi NZ; પાટી	E ; 8-0	1.3 ; 385 ; 45	Kukurmunda 1-0
2141	Paroḍ ;NZ; પરોડ	NW ; 22-0	1.4 ; 244 ; 33	Kukurmunda 10-0
2142	Pāṭipāḍā NZ; પાટીપડા	NW ; 22-0	1.9 ; 694 ; 130	Kukurmunda 5-0
2143	Pethāpur UL; પેથાપુર	N ; 9-0	0.9 ; 190 ; 32	Songadh 8-0
2144	Phaṇasā UB; ફણસા	N ; 22-0	3.8 ; 4849 ; 936	Local

Railway St.; Distance.		Weekly Bazar; Distance; Bazar Day.			Motor Stand; Distance.		Drinking water facilities	Institutions and other information.
Bhilad	4-0	Balwada	1-0	Sun.	Local		w	sl(pr) ; pyt.
Navapur	9-0	Navapur	10-0	Sat.	Navapur	7-0	w ; rv	6sl(pr) ; tl ; cs ; (mp) ; pyt.
Sanjan	7-0	Khattalwada	4-0	Sat.	Local			sl(pr, em, 3sl) 3dp ; dh dg, 2lib ; 3tl ; cs(mp) ; pyt.
Khandbara	11-0	Raigadh	1-0	Thu.	Raigadh	1-0	w	sl(pr) ; tl ; pyt.
Dhakwad	12-0	Kukurmunda	1-0	Fri.	Kavithe	1-0	rv	sl(pr) ; tl ; pyt.
Nandarbar	15-0	Taloda	5-0	Fri.	Taloda	4-0	w ; rv	sl(pr) ; tl ; pyt.
Nandarbar	11-0	Local		Sun.	Local		rv ; t	sl(pr) ; h ; m ; 3dp ; dh ; tib ; tl ; 2cs ; pyt. Hindada Devi fr. (vsk. sud. 15).
Navapur	4-0	Navapur	5-0	Sat.	Navapur	5-4	w ; rv	sl(pr) ; pyt.
Songadh	2-0	Navapur	14-0	Sat.	Songadh	1-4	w	sl(pr) ; pyt.
Umbergaon	3-0	Khattalwada	3-0	Sat.	Khattalwada	3-0	w	sl(pr) ; pyt.
Karambele	1-0	Jambhuri	2-0	Wed.	Palikarambele	1-0	w	sl(pr) ; cs ; pyt.
Bhadbhunja	3-0	Navapura	10-0	Sat.	Songadh	5-0	w	sl(pr) ; pyt.
Nandarbar	18-0	Kukurmunda	4-0	Thu.	Kavthe	6-0	rv	sl(pr) ; pyt.
Nandarbar	15-0	Kukurmunda	1-0	Thu.	Kukurmunda	1-0	w ; rv	sl(pr).
Nandarbar	25-0	Akkalkuwa	3-0	Wed.	Akkalkuva	6-0	w ; rv	sl(pr) ; pyt.
Nandarbar	18-0	Khapar	7-0	Tue.	Akkalkuwa	6-0	rv	sl(pr) ; pyt.
Bhadbhunja	5-0	Songadh	8-0	Sun.	Songadh	6-0	w	sl(pr) ; pyt.
Bhilad	8-0	Maroli	4-0	Fri.	Local		w	sl(7pr, sl) ; 3dp, ch, dg 4tl ; cs(mp) ; pyt.

Serial No.	Village/Town name; in English Taluka abbreviation. Village/Town name in Gujarati; 1	Direction; Travelling distance from taluka/peta H. Q. 2	Area (Sq. ms.); Population; Households; Agricultural Population. 3	Post office; Distance in miles 4
2145	Phulavāḍī NZ.; ફુલવાડી	SE ; 7-0	2.1 ; 1016 ; 120	Kukurmunda; 1-0
2146	Pimpaḷās NZ.; પીંપળાસ	N ; 10-0	0.8 ; 310 ; 51	Taloda; 3-4
2147	Pimpaḷod Tarf Nizar NZ.; પીંપળોદ તર્ફે નિઝર	E ; 10-0	2.1 ; 650 ; 89	Nandarbar; 11-0
2148	Pisāvar NZ.; પિસાવર	E ; 13-0	1.9 ; 995 ; 111	Prakashe; 5-0
2149	Punād UB.; પુનાદ	N ; 22-0	2.2 ; 748 ; 123	Karambele; 3-0
2150	Raigaḍh NZ.; રાયગઢ	N ; 12-0	7.2 ; 2614 ; 419	Dhanora;; 6-0
2151	Rājapur ZZ.; રાજાપુર	SE ; 8-0	1.0 ; 709 ; 118	Kukurmunda; 4-0
2152	Ranāicī NZ.; રનાઈચી	NW ; 11-0	1.1 ; 339 ; 82	Akkalkuwa; 3-0
2153	Rāṇī Khaḍakaḷe NZ.; રાણીખડકળે	S ;	1.4 ;	...
2154	Sadagavāṇ NZ.; સદગવાણ	E ; 12-0	2.8 ; 918 ; 125	Taloda; 6-0
2155	Sakarade UL.; સાકરદે	W ; 5-0	1.0 ; 343 ; 50	Navapur; 6-0
2156	Sañjāṇ UB.; સંજાણ	NW ; 6-2	2.3 ; 4613 ; 944	Local;
2157	Sarai UB.; સરઈ	N ; 10-0	1.2 ; 614 ; 99	Marali; 4-0
2158	Saroṇḍā UB.; સરોંડા	N ; 3-0	2.6 ; 1227 ; 200	Nargoal: 2-0
2159	Saravāle NZ.; સરવાલે	E ; 4-0	1.7 ; 902 ; 187	Nandarbar; 6-0
2160	Sase UL.; સાસે	W ; 6-0	1.0 ; 363 ; 50	Navapur; 6-0
2161	Satolā digar NZ.; સાતોળા દિગર	NE ; 10-0	0.8 ; 67 ; 11	Taloda: 5-0
2162	Sāḷe NZ.; સાળે	W ; 15-0	2.4 ; 681 ; 106	Dhanora; 7-0
2163	Selud UL.; સેલુદ	W ; 8-0	1.0 ; 755 ; 149	Navapur; 9-0
2164	Śelū NZ.; શેલૂ	NE ; 4-6	0.8 ; 80 ; 40	Nandarbar; 8-0

Railway St.; Distance. 5	Weekly Bazar; Distance; Bazar Day. 6	Motor Stand; Distance. 8	Drinking water facilities	Institution nd other information.
Nandarbar; 15-0	Kukurmunda; 1-0; Thu.		w.	sl(pr) ; cs(mp) pyt.
Nandarbar; 14-0	Taloda: 3-4; Fri.	Gorase; 1-0	rv.	sl(pr) ; cs(mp) ; pyt.
Nandarbar; 11-0	Nandarbar; 11-0; Tue.	Korit; 5-0	w.	sl(pr) ; lib ; pyt.
Nandarbar; 22-0	Prakhashe; 3-0; Wed.	Local;	w.	sl(pr) ; cl ; pyt.
Karambele; 3-0	Jambhuri; 1-4; Wed.	Sarigam; 4-0	w ; rv.	sl(pr) ; lib ; pyt.
Khandbara; 10-0	Local; Thu.	Pimplod; 8-0	t.	3sl(pr) ; sh ; 3tl ; cs ; pyt.
Nandarbar; 20-0	Kukurmunda; 4-0; Thu,	Modalpadi; 1-0	w.	sl(pr).
Nandarbar; 19-0	Akkalkuwa; 3-0; Wed.	Kavathe; 5-0	w.	sl(pr) ; py .
...	...	...	...	Deserted.
Nandarbar; 20-0	Taloda; 6-0; Fri.	Local;	w.	sl(pr) ; cs ; tl ; pyt.
Bhadbhunja; 2-4	Navapur; 6-0; Sat.	Navapur; 5-0	w ; rv.	sl(pr) ; pyt.
Local.	Khattalwada; 3-0. Sat.	Local;	w.	2sl(pr) ; cmp ; 2dp ; dh ; ch ; 3dg ; lib ; cs(mp); pyt.
Sanjan; 10-0	Marali: 4-0; Fri.	Local;	w.	sl(pr) ; pyt.
Sanjan; 7-0	Khattalwada; 4-0; Sat.	Local;	w.	sl(pr) ; dp ; lib ; cs(mp); pyt.
Nandarbar: 6-0	Nandarbar: 6-0; Tue.	Nandarbar; 6-0	w ; n.	sl(pr) ; dh ; dg ; lib ; 2tl ; cs(mp) ; pyt.
Bhadbhunja; 2-4	Navapur: 6-0; Tue.	Navapur: 4-0	w ; rv.	sl(pr) ; pyt.
Nandarbar; 6-0	Nandarbar; 6-0; Tue.	Taloda; 4-0	rv.	tl ; pyt.
Khandbara; 11-0	Vadali: 1-0; Fri.	Raigadh; 8-0	w.	sl(pr) ; pyt.
Bhadbhunja; 2-0	Navapur; 9-0; Sat.	Navapur; 8-0	w.	sl(pr) ; cs ; pyt.
Nandarbar; 8-0	Nandarbar; 8-0; Tue.	Sajiu; 1-4	rv.	

Sr. No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati. 1	Direction; Travelling distance. from Taluka peta H.Q. 2	Area (Sq. miles); Population; Households; Agricultural Population. 3	Post office; Distance. in miles. 4
2165	Śiragoān UB; શિરગાંવ	N ; 8–0	6.3 ; 4128 ; 863	Local
2166	Solasumbā UB; સોળસુંબા	E ; 4–4	2.8 ; 2244 ; 444	Local
2167	Sulavāḍe NZ; સુલવાડે	E ; 12–0	6.9 ; 268 ; 31	Prakasha 4–0
2168	Sundarapur UL; સુંદરપુર	E ; 2–0	2.1 ; 509 ; 86	Navapur 2–0
2169	Taḍagāṁ UB; તડગામ	N ; 5–4	1.8 ; 825 ; 187	Sanjan 11–0
2170	Talawāḍe UB; તલવાડે	NE ; 14–0	0.8 ; 329 ; 54	Sanjan 2–0
2171	Tāpīkhaḍakāḷe NZ; તાપી ખડકાળે	W ; 15–2	1.0 ; 593 ; 106	Dhanora 9–0
2172	Ṭembhi UB; ટેંભી	E ; 3–0	1.2 ; 883 ; 196	Sanjan 2–0
2173	Thuṭī UL; થુટી	N ; 9–0	2.8 ; 563 ; 96	Songadh 5–0
2174	Torande NZ; તોરંદે	W ; 12–0	1.4 ; 510 ; 85	Akkalkuwa 2–0
2175	Tuḷase NZ; તુળસે	SE ; 8–0	1.7 ; 410 ; 84	Kukurmunda 2–0
2176	Tuṁb UB; તુંબ	NW ; 9–0	2.7 ; 870 ; 172	Sanjan 18–0
2177	Ubhad NZ; ઉભદ	E ; 14–0	1.2 ; 298 ; 48	Prakasha 3–0
2178	Uchhal UL; ઉચ્છલ	HQ ;	2.1 ; 1380 ; 266	Navapur 1–0
2179	Uṁbargām UB; ઉંબરગામ	HQ	...	...
2180	Umajā NZ; ઉમજા	NW ; 22–0	0.4 ; 256 ; 44	Kukurmunda 8–0
2181	Uṅṭāvad NZ; ઉંટાવદ	N ; 11–0	0.7 ; 214 ; 40	Taloda 2–0
2182	Veḍalī NZ; વેડલી	W ; 15–0	3.0 ; 1752 ; 285	Dhanora 8–0
2183	Vadade Kh. UL; વડદે ખુર્દ	W ; 3–0	2.6 ; 743 ; 119	Navapur 6–0

Railway St.; Distance.	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance.	Drinking water facilities	Institutions and other information.
5	6	7	8	9
Bhilad 2–0	Khattalwada 6–0 Sat.	Local	w	sl(4 pr ; sl) ; 3dp ; ch ; dg ; lib ; 2tl ; cs(mp) ; pyt.
Local	Khattalwada 3–0 Sat.	Local	w	2sl(pr) ; 2dp ; lib ; 2tl ; cs(mp) ; pyt.
Nandarbar 13–0	Prakasha 4–0 Wed.	Korit 3–0	rv	sl(pr) ; pyt.
Navapur 2–0	Navapur 2–0 Sat.	Navapur 8–0	w ; rv	sl(pr) ; pyt.
Sanjan 11–0	Local Fri.	Local	w	sl(pr) ; dg ; pyt.
Sanjan 2–0	Khattalwada 4–0 Sat.	Sanjan 2–0	w	pyt.
Khandbara 13–0	Vadali 1–0 Fri.	Raigadh 8–0	w	sl(pr) ; pyt.
Sanjan 2–0	Khattalwada 4–0 Sat.	Sanjan 2–0	2w	sl(pr) ; cs(mp) ; pyt.
Songadh 5–0	Songadh 5–0 Sun.	Songadh 10–0	w	sl(pr) ; pyt.
Nandarbar 26–0	Akkalkuwa 2–0 Wed.	Akkalkuwa 2–0	w	sl(pr) ; pyt.
Nandarbar 16–0	Kukurmunda 2–0 Thu.	Taloda 6–0	w	sl(pr) ; cs ; pyt.
Sanjan 18–0	Local Fri.	Solsumbhe 3–0	w ; rv	sl(pr) ; pyt.
Nandarbar 22–0	Prakasha 3–0 Wed.	Visav 1–0	rv	sl(pr) ; tl ; cs ; pyt.
Navapur 1–0	Navapur 1–0 Sat.	Navapur 2–0	w ; rv	sl(pr) ; dp ; cs ; pyt.
...	...	Local	w	sl(pt ; sl) ; mp ; 8dp ; dh; 4n ; gm ; lib ; tcs; pyt.
Nandarbar 24–0	Akkalkuwa 21–0 Wed.	Akkalkuwa 3–0	w ; rv	sl(pr) ; pyt.
Nandarbar 16–0	Taloda 2–0 Fri.			
Khandbara 12–0	Local Fri.	Raigadh 4–0	w	sl(pr) ; pyt.
Bhadbhunja 2–4	Navapur 6–0 Sat.	Local	rv	2sl(pr) ; mg ; dl ; lib ; 4tl ; cs(mp) ; pyt.

Sr. No.	Village or Town name in English; Taluka abbreviation. Village or Town name in Gujarati. 1	Direction; Travelling distance from taluka/peta H. Q. 3	Area (Sq. Miles); Population; Households; Agricultural Population. 3	Post office; Distance in Miles. 4
2184	Vadapātad UL.; વડપાતડ	W ; 4-0	0.6 ; 304 ; 53	Navapur; 9-0
2185	Vañka NZ.; વાંકા	E ; 4-0	2.5 ; 1161 ; 154	Nizar; 3-0
2186	Velade NZ.; વેલદે	NE ; 4-0	7.9 ; 3027 ; 276	Nizar; 4-0
2187	Valavāde UB.; વલવાડે	NE ; 22-0	2.3 ; 1385 ; 377	Achhani; 1-0
2188	Vankās UB.; વાંકાસ	E ; 7-0	1.8 ; 701 ; 134	Khattalwada; 4-0
2189	Vyāval NZ.; વ્યાવલ	E ; 13-0	2.9 ; 547 ; 98	Prakasha; 3-0
2190	Veñsagām NZ.; વેંસગામ	SW ; 11-0	0.8 ; 185 ; 32	Kukurmunda; 3-0
2191	Vadapādā NZ.; વડપાડા	W ; 20-0	0.7 ; 50 ; 12	Akkalkuwa; 1-4
2192	Zarolī UL.; ઝરોલી	NE ; 18-0	3.6 ; 1554 ; 313	Bhilad; 4-0
2193	Zaramapādā UL.; ઝરમપાડા	NW ; 12-0	1.9 ; 439 ; 82	Navapur; 12-0
2194	Zapāāmalī NZ.; ઝપાઆમલી	NW ; 20-0	0.9 ; 400 ; 60	Akkalkuwa; 4-0
2195	Zumakatī NZ.; ઝુમકટી	W ; 19-0	1.9 ; 439 ; 82	Navapur; 12-0
2196	Zīribedā NZ.; ઝીરીબેડા	NW ; 20-0	0.6 ; 142 ; 26	Kukurmunda; 9-0

Railway St.; Distance.	Weekly Bazar; Distance; Bazar Day.	Motor Stand; Distance.	Drinking water facilities	Institutions and other information.
5	6	7	8	9
Navapur; 9–0	Navapur; 9–0; Sat.	Navapur; 4–0	w.	sl(pr) ; pyt.
Nandarbar; 11–0	Nandarbar;11–0; Tue.	Sajipur; 1–0	rv.	sl(pr) ; tl ; ca ; pyt.
Nandarbar; 14–0	Nizar; 4–0; Sun.			
Karambele; 0–4	Achhari; 1–0; Thu.	Local;	w.	sl(pr) ; lib ; tl ; pyt.
Sanjan; 2–0	Khattalwada;4-0; Sat.	Khattalwada; 3–0	w ; rv.	2sl(pr) ; 5dg ; pyt.
Nandarbar; 13–0	Prakasha; 3–0; Wed.	Korit; 2–0	rv.	sl(pr) ; pyt.
Nandarbar; 17–4	Kukurmunda; 3–0; Thu.	Kavathe; 5–0	rv.	sl(pr) ; pyt.
Nandarbar; 24–0	Akkalkuwa; 1–0; Wed.	Akkalkuwa; 2–0	w.	pyt.
Bhilad; 4–0	Talaweda; 2–0; Sun.	Bhilad; 4–0	w ; rv.	2sl(pr) ; tl ; ca ; pyt.
Bhadbhunja; 1–4	Navapura; 12–0; Sat.	Navapur; 8–0	w ; rv.	sl(pr) ; pyt.
Nandarbar; 20–0	Akkalkuwa; 4–0; Wed.	Akkalkuwa; 5–0	rv.	sl(pr) ; pyt.
Bhadbhunja; 1–4	Navapur; 12–0; Sat.	Akkalkuwa; 1–0	w.	pyt.
Nandarbar; 25–0	Akkalkuwa; 3–0; Wed.	Akkalkuwa; 3–0	rv.	sl(pr) ; pyt.

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(In this index diacritical marks have been avoided, although in certain chapters many of the place names and other words are marked diacritically in the text).

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